



ENVIRONMENTAL CONSULTING • GEOTECHNICAL ENGINEERING • CONSTRUCTION MATERIALS TESTING

**PHASE II ENVIRONMENTAL  
SITE ASSESSMENT  
144 MONTELLO ST  
LEWISTON, MAINE**

Prepared for:

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION  
17 State House Station  
Augusta, Maine 04333

Under a grant from the American Recovery and Reinvestment Act of 2009 (ARRA)  
Grant #2B-96112201-0



Prepared by:

SUMMIT ENVIRONMENTAL CONSULTANTS, INC.  
640 Main St  
Lewiston, Maine 04240

October 27, 2009  
Project # 16966

**Lewiston:**

640 Main Street • Lewiston, ME 04240  
Tel: (207) 795-6009 • Fax: (207) 795-6128

**Bangor:**

8 Harlow St., Suite 4A • Bangor, ME 04401  
Tel: (207) 262-9040 • Fax: (207) 262-9080

**Augusta:**

434 Cony Road • Augusta, ME 04330  
Tel: (207) 621-8334 • Fax: (207) 626-9094

**Portland:**

1 Industrial Way, Suite 7 • Portland, ME 04103  
Tel: (207) 221-6360 • Fax: (207) 221-6146

## EXECUTIVE SUMMARY

In April 2009 Summit Environmental Consultants, Inc. (Summit) completed a Phase I Environmental Site Assessment (ESA) on undeveloped property located at 144 Montello Street in Lewiston, Maine (the Site) to determine whether the property has Recognized Environmental Conditions (RECs), as defined by the ASTM International (ASTM) Standard E 1527-05.

Based on the investigations conducted during the Phase I ESA, RECs, Historical Recognized Environmental Conditions and/or De Minimis Conditions were not identified at the Site.

Subsequently, further investigation of Fill material present on the Site resulted in a decision to proceed with a Phase II ESA to characterize its physical and chemical properties.

On July 6, 2009, five test pits were excavated on the property to observe the nature and extent of the Fill. During excavation of the test pits, soil samples were collected and screened for the presence of total organic vapors (TOVs) using a MiniRae, Inc.® "MiniRae 2000" field-portable photoionization detector (PID) equipped with a 10.6 eV probe. Each test pit was excavated to native soil. The soils encountered in Test Pit-1 (TP-1) through TP-5 appeared to be primarily earthen material (brown silty-sand, gravel and clay) with minor amounts (i.e. several small pieces) of asphalt found in TP-2, TP-3 and TP-4. Fill thickness ranged from 3.5 feet in TP-2 to 6 feet in TP-4.

TP-1 exhibited the highest PID reading of 27.3 parts per million (ppm). PID responses in the remaining test pits ranged from 0.6 ppm to 16.1 ppm. Hazardous materials and/or petroleum products (e.g., odors, stains, sheens) were not noted in any of the test pits.

Because of the consistent PID responses within the five test pits, as well as the presence of small quantities of asphalt, concrete, and brick, it was determined that the Fill material was not virgin borrow material and should be further characterized with respect to chemical characteristics. Subsequently, based on a conceptual building, driveway and parking area layout provided by JF Murphy's architect, a second series of seven test pits were excavated on the parcel on July 23, 2009 to collect soil (Fill) samples for analysis of metals, volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs). Soil samples were collected from four of the seven test pits and submitted to Maine Environmental Laboratory (MEL) of Yarmouth, Maine.

Analytical results did not report the presence of VOCs and the concentration of metals in the samples were not elevated. However, soil sample results from TP-2, 3, 5 and 6 reported the presence of Polycyclic Aromatic Hydrocarbons (PAHs). PAHs are typically associated with the incomplete combustion of coal, coal tar, oils or other organic material and can be present in ash or combustion residue.

The Maine Department of Environmental Protection (MEDEP) has established Remedial Action Guidelines (RAGs) for contaminated soil. Although PAH concentrations did not exceed the MEDEP guidelines, several reported concentrations are near the target guidelines. Based on these results, JF Murphy homes contacted DEP to discuss site conditions and potential options for future development of the Site. Discussions with DEP determined that the property would qualify as a Brownfields Site in the State of Maine Brownfields program and is eligible to receive financial assistance to investigate and remediate the property.

Following a review of existing site data, MEDEP requested that additional soil samples be collected and analyzed for PAHs to assess potential "hot spots" and to fill gaps in the distribution of samples across the Site.

In October 2009 a Phase II Environmental Site Assessment (ESA) was completed at the Site in accordance with MEDEP Brownfields program requirements. The Phase II ESA included the collection of soil samples from 5 test pits designated TP-A through TP-E within the Fill material and the collection of a background soil sample outside of the limit of Fill.

PAHs were reported present in each test pit sample collected from the Fill. Concentrations varied between sample locations with concentrations reported both above and below MEDEP RAGs. Samples from Test Pits TP-A and TP-C exhibited the highest concentrations of PAHs with up to 5 individual compounds exceeding their respective target guidelines as presented in Appendix A of MEDEP's July 2009 RAG document.

Given the likelihood that Fill was loaded into delivery trucks at the source(s), dumped on the Site and subsequently graded to a relatively flat surface, a more or less uniform distribution of PAHs could reasonably be expected within the Fill at the Site.

Under current conditions, exposure risk is considered moderate due to the presence of Fill material at ground surface and lack of deterrents to trespassers. However, there is no evidence that trespassers routinely traverse the Site, and concentrations of PAHs are not uniformly above target guidelines. Nonetheless, exposure to Fill material with elevated PAH concentrations can occur under current conditions and should future activity include disturbance of the Fill, a greater exposure risk will occur unless a soil (Fill) management plan is implemented.

Based on the data generated during the Phase II ESA, the following recommendations were made:

1. A Plan should be developed to mitigate direct exposure to impacted Fill. Mitigation can include placement of Fill under future paved areas, covering the Fill with 6-12 inches of clean Fill or topsoil and/or minimizing future disturbance of Fill materials at the Site.
2. Future construction activities should include measures to minimize direct exposure to impacted Fill and limit the potential for transport of soil via dust, erosion or tracking of soil onto roadways by construction equipment.
3. If Fill material is to be removed from the Site, it must be disposed of at a facility licensed to manage and dispose of PAH impacted soil.
4. In order to pursue a Release of Liability Letter from MEDEP for the Site, JF Murphy Homes should submit a Voluntary Response Action Program (VRAP) application to the MEDEP.



**PHASE II ENVIRONMENTAL SITE ASSESSMENT  
144 MONTELLO ST  
LEWISTON, MAINE**

<b>EXECUTIVE SUMMARY .....</b>	<b>I</b>
<b>1.0 INTRODUCTION .....</b>	<b>5</b>
1.1 PURPOSE .....	5
1.2 SPECIAL TERMS AND CONDITIONS .....	5
1.3 LIMITATIONS AND EXCEPTIONS OF ASSESSMENT .....	5
1.4 SITE DESCRIPTION AND SETTING .....	5
1.4.1 Physical Setting .....	56
1.4.2 Site History and Land Use .....	6
1.4.3 Adjacent Property Land Use .....	6
1.4.4 Summary of Previous Assessments .....	6
1.5 RECOGNIZED ENVIRONMENTAL CONDITIONS .....	67
<b>2.0 INVESTIGATION METHODOLOGY .....</b>	<b>67</b>
2.0.1 Supplemental Records Review .....	7
2.0.2 Conceptual Site Model .....	7
2.0.3 Chemical Testing Plan .....	7
2.0.4 Deviations from the Work Plan .....	8
2.0.5 Field Explorations and Methods .....	89
2.1 BACKGROUND SAMPLES .....	89
2.2 SITE SAMPLES .....	89
2.2.1 Soil Samples .....	89
2.3 SAMPLING AND CHEMICAL ANALYSES AND METHODS .....	910
2.3.1 Soil .....	910
<b>3.0 EVALUATION AND PRESENTATION OF RESULTS .....</b>	<b>910</b>
3.1 SUBSURFACE CONDITIONS .....	910
3.1.1 Geologic Setting .....	910
3.2 ANALYTICAL DATA .....	911
3.2.1 Background .....	911
3.2.2 Site Specific Samples .....	1011
<b>4.0 CONCLUSIONS .....</b>	<b>1112</b>
4.1 VERIFICATION OF CONCEPTUAL SITE MODEL .....	1112
4.2 EVALUATION OF MEDIA QUALITY .....	1112
4.3 AFFECTED MEDIA .....	1213
<b>5.0 RECOMMENDATIONS .....</b>	<b>1213</b>



**6.0 SIGNATURE AND QUALIFICATIONS ..... 1314**

**Tables:**

- Table 1: October 6, 2009 Soil Sample Analytical Results
- Table 2: July 23, 2009 Soil Sample Analytical Results

**Figures:**

- Figure 1: Site Plan

**Appendices:**

- Appendix A: Test Pit Excavation Logs and Photos
- Appendix B: Maine Environmental Laboratory Reports

## **1.0 INTRODUCTION**

This Phase II Environmental Site Assessment (ESA) was completed by Summit for, and at the request of MEDEP (the Client) under a grant (2B-96112201-0) from the American Recovery and Reinvestment Act of 2009 (ARRA). The Scope of Work was developed in conjunction with MEDEP to address environmental concerns identified in the Phase I ESA and subsequent investigations. A Site Specific Quality Assurance Project Plan (SSQAPP) was prepared for the Site and approved by MEDEP and EPA prior to the field activities proceeding on the site. As a portion of the SSQAPP, a Conceptual Site Model (CSM) and sampling plan were created to assist in guiding field activities and setting project goals.

### **1.1 PURPOSE**

Summit was retained by the MEDEP under the State of Maine Brownfields Program on behalf of JF Murphy Homes to conduct this Phase II ESA to investigate subsurface conditions at an undeveloped property designated as 144 Montello Street in Lewiston, Maine (Site) to identify and delineate areas of elevated PAH concentrations in on-site Fill material, fill data gaps identified following review of existing data and provide information to support a Site remedy. The current plans for the property are to construct a housing unit for JF Murphy clients who require specialized care and service.

### **1.2 SPECIAL TERMS AND CONDITIONS**

This report has been prepared for the exclusive use of the MEDEP (the Client) and JF Murphy Homes (Brownfields Program applicant) and should not be reproduced or disseminated without the written approval of Summit, the Client or the Program applicant. Summit has retained a copy of this report. No additions or deletions are authorized without the written consent of Summit. Use of this report in whole or in part by parties other than the Client or Program applicant or his/her authorized agent is prohibited.

### **1.3 LIMITATIONS AND EXCEPTIONS OF ASSESSMENT**

No limitations to the investigation were encountered during the completion of this Phase II ESA.

### **1.4 SITE DESCRIPTION AND SETTING**

The Site consists of an approximately 0.86 acre parcel of property located at 144 Montello Street in Lewiston, Maine. The City of Lewiston Tax Assessor identifies the Site as a portion of Lot 25 on Map 143. At the time of the Phase I Site visit, the City of Lewiston had not subdivided the Site away from the parent parcel. The Androscoggin County Registry of Deeds has a legal description of the parent parcel recorded in Book 4830 Page 169. The Site is located in an area zoned by the City of Lewiston as Suburban Residential (SR).

A Site Plan is included as Figure 1.

#### **1.4.1 Physical Setting**

The Site is an undeveloped parcel of land with relatively flat topography, sloping downward to the northeast toward a small unnamed stream and wetland complex that runs through the northern portion of the Site. Adjoining properties include Montello Street and residential properties to the south, undeveloped land to the north and east, and residential properties to the west.

The United States Geological Survey (USGS) Lewiston, Maine 7.5 Minute Topographic Quadrangle Map, which includes the Site and surrounding properties, shows that the Site is at an approximate elevation of 232 feet above mean sea level.

The Bedrock Geology Map of Maine (Thompson et al. 1985), describes the Site as being underlain by the Sangerville Formation which consists of interbedded pelite and limestone and/or dolostone.

The Surficial Geologic Map Maine (Osberg et al. 1985) indicates that glacial till deposits consisting of sand, silt clay, and stones underlie the Site.

#### **1.4.2 Site History and Land Use**

Information from local officials and available historic records suggest that the Site has not been previously developed. Historical records and aerial photographs show the Site as undeveloped.

#### **1.4.3 Adjacent Property Land Use**

Properties adjacent to the Site include:

North Undeveloped property.

South Montello Street and residential property.

East Undeveloped property.

West Residential property.

#### **1.4.4 Summary of Previous Assessments**

- A Phase I Environmental Site Assessment was completed by Summit in April 2009. Recognized Environmental Conditions (RECs) as defined by ASTM 1527-05 were not identified during the Phase I ESA. However, subsequent information resulted in a recommendation to further investigate earthen Fill material on the Site.
- Five test pits were excavated on the Site on July 6, 2009. Soil samples were field screened for the presence of total organic vapors (TOVs). Low concentrations of TOVs were reported present in soil samples and visual observations of test pits indicated the presence of asphalt, concrete and bricks within Fill material on the Site.
- Seven test pits were excavated on the Site on July 23, 2009. Four soil samples were collected and submitted for laboratory analysis of metals, VOCs and SVOCs. Results indicated the presence of PAHs at concentrations near the MEDEP Remedial Action Guideline target concentrations for remediation.

### **1.5 RECOGNIZED ENVIRONMENTAL CONDITIONS**

- Recognized Environmental Conditions, Historical Recognized Environmental Conditions and/or De Minimis Conditions were not identified in the Phase I ESA. Subsequently, further investigation of Fill material present on the Site resulted in a decision to proceed with a Phase II ESA to characterize its physical and chemical properties

## **2.0 INVESTIGATION METHODOLOGY**

The scope of work completed for this assessment was essentially as described in the SSQAPP, which was provided to MEDEP and EPA. The SSQAPP included a Conceptual Site Model, which, along with the results of the Phase I Assessment and subsequent test pit excavations, provided



the technical basis for the number and location of samples, the media sampled and laboratory analyses to be completed.

The SSQAPP also provided a complete description of the field and laboratory methods to be used. A brief description of Phase II activities is provided below including any methodology that differed notably from the methods described in the SSQAPP.

### **2.0.1 Supplemental Records Review**

Records were reviewed at the City of Lewiston Code Enforcement Office to determine if additional information concerning the source of Fill was available prior to the commencement of Phase II activities for this Site. No additional information was discovered during this record review.

### **2.0.2 Conceptual Site Model**

The Site is undeveloped and well vegetated. Earthen Fill has been placed on the southern portion of the Site resulting in a relatively flat surface topography. The fill extends 60 to 100 feet +/- from Montello Street toward the north (covering approximately one-half of the property). The Site is bisected by an unnamed stream and wetland complex. The southern Fill area is 5-8 feet higher in elevation than the stream and wetland complex to the north.

The Surficial Geologic Map Maine (Osberg et al. 1985) indicates that glacial till deposits consisting of sand, silt clay, and stones underlie the Fill that has been placed on the Site.

The United States Geological Survey (USGS) Lewiston, Maine 7.5 Minute Topographic Quadrangle Map, which includes the Site and surrounding properties, shows that the Site is at an approximate elevation of 232 feet above mean sea level. Review of this map shows that the regional topography is relatively flat, but generally slopes downward to the north towards an unnamed drainage, which runs through the Site.

Based upon the USGS topographical map for the Site and surrounding area, regional groundwater flow is inferred to be generally to the northwest toward Stetson Brook. Locally, shallow ground water likely discharges to the unnamed stream and wetland complex on the northern portion of the Site.

Based on the above conditions, PAHs that are present in Fill placed at the Site may migrate along the ground surface (dust, sediment in stormwater). Currently, the Site is well vegetated with little evidence of erosion within the Fill material. PAHs generally tend to have low mobility in soil and are not expected to migrate readily through infiltration of stormwater.

Therefore, PAHs, where present in Fill, are expected to remain in place unless exposed by erosion or other site disturbances.

### **2.0.3 Chemical Testing Plan**

Because previous analytical results and test pit observations have defined the extent of Fill material and the presence of PAHs, the sampling plan focused on obtaining additional soil samples for PAH analysis to provide adequate spatial distribution and to assess the potential for "hot spots" to exist within the Fill.

Five soil samples were collected from 6-24 inches below ground surface within the Fill material and submitted for laboratory analysis of PAHs.

## **2.0.4 Deviations from the Work Plan**

No significant deviations from the Work Plan occurred during the investigation. Due to the presence of the unnamed stream and wetland complex, areas to collect a background sample were limited. A location was selected on the north edge of the wetland area at a depth of approximately 0-6 inches in order to remain above the water table.

## **2.0.5 Field Explorations and Methods**

Prior to initiating intrusive activities, Summit contacted DIGSAFE of Maine (DIGSAFE) to determine the location of underground public utilities on-site in the work area. DIGSAFE personnel indicated that local gas, electric, and phone companies would be notified. In addition, Summit obtained an Excavation Permit from the City of Lewiston to ensure that local water and sewer districts were notified of the planned excavation activity.

Test pits were excavated with a Takeuchi TB-135 rubber tracked excavator to depths ranging from 3 to 7 feet below ground surface.

## **2.1 BACKGROUND SAMPLES**

A background soil sample was collected from 0-6 inches to ascertain if PAHs discovered during on-site activities could be attributed to off-site sources or naturally occurring factors. Due to Site constraints (i.e., Fill extended to the property lines on the southern portion of the Site) the background location was selected to the north of the wetland area that bisects the Site. This area did not appear to contain Fill material based on visual observation of the area.

The background soil sample BK-SS-1 was collected with a pre-cleaned hand auger with a 3-inch bucket head. Because the ground water table was present at approximately 10-12 inches bgs, the sample was collected from 0-6 inches bgs to remain above the ground water table.

## **2.2 SITE SAMPLES**

### **2.2.1 Soil Samples**

Test pits were excavated at five locations as shown on the Site Plan. Test pit excavations ranged from 3 to 7 feet below ground surface (bgs). One grab sample was collected from each test pit at depths between 6 and 24 inches bgs and from within Fill material. Samples were placed in laboratory supplied containers and delivered to Maine Environmental Laboratory for analysis of PAHs.

Bedrock was not encountered in any of the test pits. Ground water seepage was observed in most test pits at the interface of Fill material and assumed native soil.

Soil samples were field screened for total organic vapors (TOVs) using a *MiniRae 3000*<sup>®</sup> field-portable PID equipped with a 10.6 eV probe, calibrated as benzene in accordance with the manufacturer's specifications. PID results were non-detect (ND) for all samples screened.

Three soil samples (TP-A, TP-B and TP-C) were collected across the Site to provide aerial distribution of sampling points within the Fill to supplement previous analytical results. Two samples (TP-D and TP-E) were collected adjacent to previously collected (July 23, 2009) and analyzed samples in the proposed development area which had reported elevated PAH concentrations. Soil samples (TP-A through TP-E) were collected from 6-24 inches bgs with a pre-cleaned shovel and nitrile gloves. No unusual conditions were observed during the collection of these samples. Test Pit Excavation Logs are included in Appendix A.

A discussion of results is provided in Section 3.0.



## **2.3 SAMPLING AND CHEMICAL ANALYSES AND METHODS**

### **2.3.1 Soil**

Based on the Phase I report, visual observations of the Site and results of previous sample analysis, the analytical suite was focused on PAHs within Fill material previously placed on the Site. A total of five samples from Fill material and one background soil sample were collected for laboratory analysis of PAHs using EPA Method 8270.

Soil (Fill) samples were collected from the side walls of the test pit with a pre-cleaned shovel. Care was taken to collect a sample from within Fill material and to minimize the potential for inclusion of asphalt, concrete or brick debris. Based upon visual observations of the depth of Fill, samples were generally collected from 6-24 inches bgs, placed in laboratory supplied containers and hand delivered to Maine Environmental Laboratory for analysis.

The background sample was collected with a hand auger from a depth of 0-6 inches bgs. The background sample was placed into a laboratory supplied container and hand delivered to MEL for analysis.

All soil samples were field screened for the presence of TOVs. However, results were ND for all samples. As a result, sample selection was not influenced by screening results.

## **3.0 EVALUATION AND PRESENTATION OF RESULTS**

### **3.1 SUBSURFACE CONDITIONS**

#### **3.1.1 Geologic Setting**

Soil encountered in test pits at the Site typically consisted of gray silty fine sand, silt and clay Fill with rocks, boulders, small quantities of asphalt, brick and concrete extending from ground surface to depths of up to 4.5 feet BGS, overlying gray silt and silty clay. An organic horizon was present in most test pits that appears to coincide with the original ground surface prior to placement of Fill in the 1990s. Ground water seepage was common and appeared to be associated with the transition from Fill material to original ground surface.

An unnamed stream and wetland complex is present on the northern portion of the Site. Although an elevation survey was not completed at the Site, the ground surface in the wetland area appeared to be similar in elevation to ground water seepage in the test pits.

Test pits were excavated to depths of 4 to 7 feet bgs. Bedrock was not encountered in any of the test pits. Bedrock outcrops were not observed on the property.

### **3.2 ANALYTICAL DATA**

#### **3.2.1 Background**

Background sample BK-SS-1 was collected with a hand auger at the northwest corner of the Site. Topographically higher ground is present at the northeast corner of the parcel; however, the ground surface contained large pieces of concrete debris and may not be representative of non-fill (background) areas of the site. Similarly, it appears that Fill extends to the southern boundary of the Site abutting Montello Street limiting the potential for a background sample immediately adjacent to the known Fill area.

A sample was collected from a depth of 0-6 inches bgs to remain above the ground water table. Field screening of the sample with a PID did not indicate the presence of TOVs (i.e., Not Detected).



The sample was collected into a laboratory supplied container and hand delivered to the laboratory under chain of custody protocol for analysis of PAHs using EPA Method 8270.

Analytical results were reported as ND for PAHs. A copy of the laboratory results is included as Appendix B.

### **3.2.2 Site Specific Samples**

#### **3.2.2.2 Subsurface Soil (Fill)**

Soil samples from the Fill material were collected from test pits A through E. Samples were collected from 6-24 inches bgs into laboratory supplied containers and hand delivered to the laboratory for analysis of PAHs.

Analytical results reported the presence of PAHs in each of the test pit samples. The greatest number and highest concentrations of PAHs were reported in test pits A and C. Test pits B, D and E had fewer PAHs at lower concentrations. Five specific PAH compounds in samples TP-A and four PAH compounds in TP-C were reported above their respective RAG target concentration.

A summary of results is presented on Table 1.

A summary of analytical results from the July 23, 2009 investigation is presented on Table 2. Although concentrations vary between the two investigations, in general, analytical results are similar from the two investigations.

A copy of the laboratory analytical reports are included as Appendix B.

## **4.0 CONCLUSIONS**

### **4.1 VERIFICATION OF CONCEPTUAL SITE MODEL**

Geologic data collected from test pit excavations, along with visual observations of site topography are consistent with the Conceptual Site Model. A gray fine sand and silt Fill with occasional rocks and boulders is present from ground surface to depths of 4.5 feet. Small quantities of asphalt, concrete and brick were observed in the Fill. A black seam of sandy material (possibly ash) was observed in test pit TP-D.

An organic horizon appears to be associated with the original ground surface underlying the Fill. Beneath the organic horizon, soil consisted of gray silt and silty clay. Ground water seepage was common and often coincided with the transition from Fill to the original ground surface at depths of approximately 3 feet bgs.

Bedrock was not encountered in the test pits.

Based upon field observations, field screening results, and laboratory analytical results, PAHs are present within Fill material previously placed at the Site. PAHs were not detected in a background soil sample collected on the northern portion of the Site beyond the limit of Fill.

PAHs were reported present in each test pit sample collected from the Fill. Concentrations varied between sample locations with concentrations reported both above and below MEDEP Remedial Action Guidelines (RAGs). Samples from Test Pits TP-A and TP-C exhibited the highest concentrations of PAHs with up to 5 individual compounds exceeding their respective target guidelines as presented in Appendix A of MEDEP's July 2009 RAG document.

However, it should be noted that PAH concentrations ranged between ND and 20 mg/kg for all samples collected (i.e., July 2009 and October 2009). As a result, it does not appear the "hot spots" are likely to be present within the Fill, but rather PAHs have been more evenly distributed throughout the Fill material.

Given the likelihood that Fill was loaded into delivery trucks at the source(s), dumped on the Site and subsequently graded to a relatively flat surface, a more uniform distribution of PAHs could reasonably be expected within the Fill at the Site.

Under current conditions, exposure risk is considered moderate due to the presence of Fill material at ground surface and lack of deterrents to trespassers. However, there is no evidence that trespassers routinely traverse the Site, and concentrations of PAHs are not uniformly above target guidelines. Nonetheless, exposure to Fill material with elevated PAH concentrations can occur under current conditions and should future activity include disturbance of the Fill, a greater exposure risk will occur unless a soil (Fill) management plan is implemented.

### **4.2 EVALUATION OF MEDIA QUALITY**

Samples were delivered to MEL on October 6, 2009 after collection. Once delivered to the laboratory, the samples were analyzed to minimize contaminant loss.

All of the samples were delivered within the applicable holding times and no exceptions to sample management were noted by the laboratory. Copies of the chains of custody are included at the end of Appendix B.

Summit obtained sample results from MEL on October 19, 2009. Included in the sample results package was a copy of QA data for PAH analysis. The lab did not indicate interferences or problems had occurred in the analytical stages or handling of the samples.

### 4.3 AFFECTED MEDIA

Soil samples collected at the Site as part of Phase II activities reported the presence of PAHs in each sample (TP-A through TP-E) of Fill material. The background sample (BK-SS-1) reported PAH concentrations as not detected (ND). Five individual PAH compounds were reported at concentrations above the MEDEP RAG with the highest concentrations reported in samples from test pits A and C.

PAH results suggest that the original source(s) of Fill were impacted by PAHs and subsequent loading, transport and grading of the Fill at the Site has resulted in relatively even distribution of PAH impacted Fill across the filled portion (southern portion) of the Site.

### 5.0 RECOMMENDATIONS

Based on the data generated during this Phase II ESA, the following recommendations are made:

- 1) A Plan should be developed to mitigate direct exposure to impacted Fill. Mitigation can include placement of Fill under future paved areas, covering the Fill with 6-12 inches of clean Fill or topsoil and/or minimizing future disturbance of Fill materials at the Site.
- 2) Future construction activities should include measures to minimize direct exposure to impacted Fill and limit the potential for transport of soil via dust, erosion or tracking of soil onto roadways by construction equipment.
- 3) If Fill material is to be removed from the Site, it must be disposed at a facility licensed to manage and dispose of PAH impacted soil.
- 4) In order to pursue a Release of Liability Letter from MEDEP for the Site, JF Murphy Homes should submit a Voluntary Response Action Program (VRAP) application to the MEDEP.



## 6.0 SIGNATURE AND QUALIFICATIONS

Summit performed services in a manner consistent with the guidelines set forth in the American Society for Testing and Materials (ASTM) E 1903-97 (Standard Practices for Environmental Site Assessments: Phase II Environmental Site Assessment Process).

The following Summit personnel possess the sufficient training and experience necessary to conduct a site reconnaissance, interviews, and other activities in accordance with this practice, and from the information generated by such activities, have the ability to develop opinions and conclusions regarding recognized environmental conditions in connection with the property in question.



---

Michael A. Deyling, C.G., P. Hg.  
President, Principal Hydrogeologist

**Table 1 - Analytical Results Poly Aromatic Hydrocarbons**  
**October 6, 2009**

Compound	Units	TP-A	TP-B	TP-C	TP-D	TP-E	BK-SS-1
Naphthalene	ug/kg	U	U	U	U	U	U
Acenaphthylene	ug/kg	1930	U	3280	U	U	U
Acenaphthene	ug/kg	U	U	U	U	U	U
Fluorene	ug/kg	396 J	U	1110 J	U	U	U
Phenanthrene	ug/kg	5030	166 J	14100	U	161 J	U
Anthracene	ug/kg	978	U	2380	U	U	U
Fluoranthene	ug/kg	7380	321	20000	218 J	325	U
Pyrene	ug/kg	8370	353	21200	283 J	372	U
Benzo(a) anthracene	ug/kg	3370	170 J	8080	164 J	165 J	U
Chrysene	ug/kg	4490	192 J	10200	179 J	209 J	U
Benzo(b) fluoranthene	ug/kg	4860	U	11000	173 J	U	U
Benzo(k) fluoranthene	ug/kg	1510	U	4080	U	U	U
Benzo(a) pyrene	ug/kg	3810	176 J	8580	182 J	180 J	U
Dibenz (a,h) anthracene	ug/kg	492 J	U	983 J	U	U	U
Benzo(g,h,I) perylene	ug/kg	1910	U	3550	U	U	U
Indeno (1,2,3-cd) pyrene	ug/kg	1980	U	4180	U	U	U
2-Methylnaphthalene	ug/kg	U	U	U	U	U	U

Results are expressed on a dry weight basis.

All samples analyzed by EPA Method 8270 (PAH only).

U = Not Detected.

J = Estimated concentration below quantitation limit.

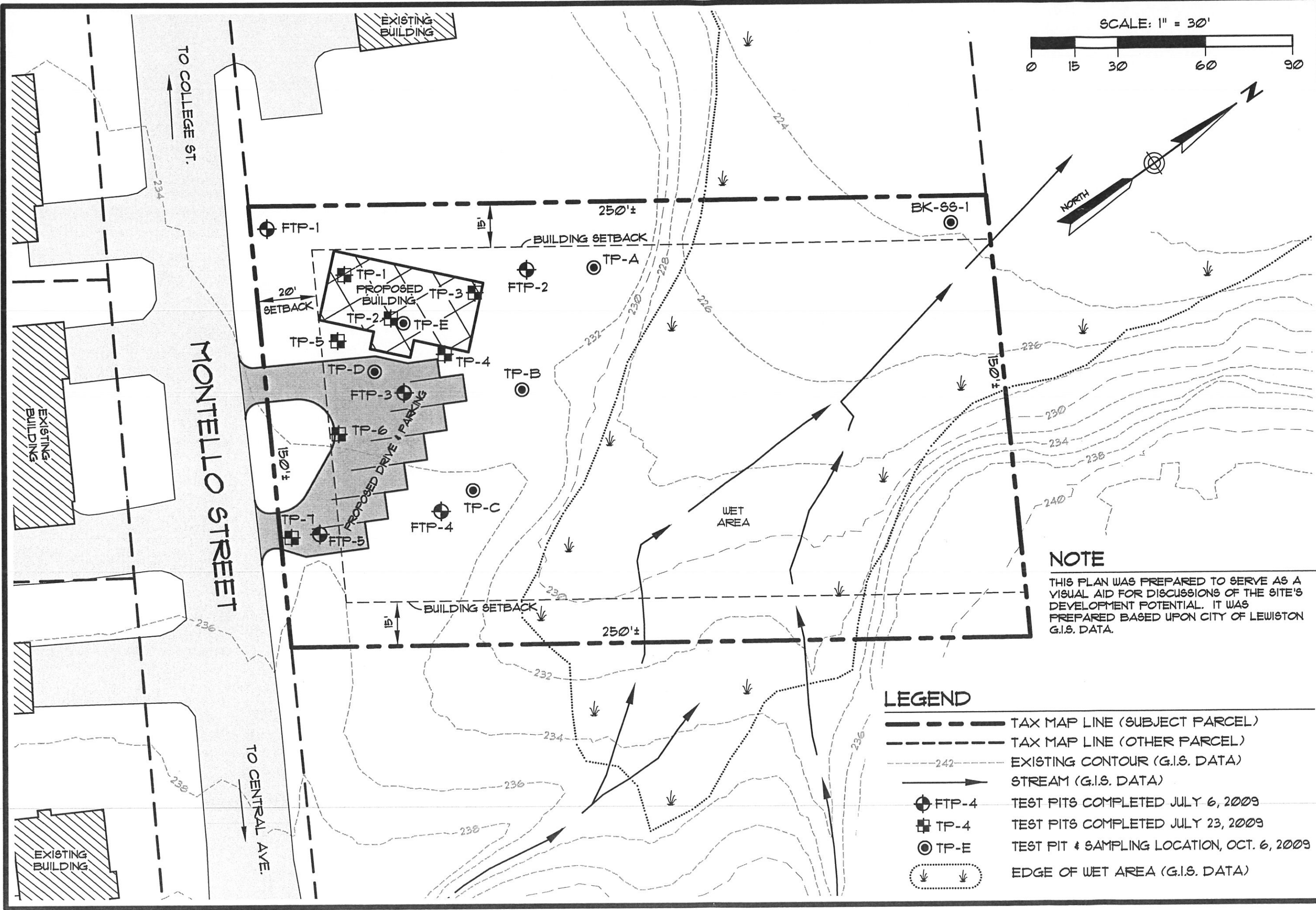
ug/kg = micrograms per kilogram or parts per billion.

JMM Environmental Consultants, Inc.

**Table 2 - Analytical Sampling Results**  
**July 23, 2009**

Parameters	Units	TP 2B	TP 3A	TP 5A	TP 6A
<b><u>METALS</u></b>					
Arsenic	mg/kg	12.3	11.5	6.6	6.3
Barium	mg/kg	66	52	57	61
Cadmium	mg/kg	ND	ND	ND	ND
Chromium	mg/kg	34	28	31	35
Lead	mg/kg	12	16	13	12
Mercury	mg/kg	0.09	0.05	0.09	0.08
Selenium	mg/kg	3.4	2.9	3.4	2.6
Silver	mg/kg	ND	ND	ND	ND
Total Solids	%	80.44	80.93	81.73	80.62
Compounds	Units	TP 2B	TP 3A	TP 5A	TP 6A
<b><u>PAHs</u></b>					
Acenaphthylene	ug/kg	U	U	196 J	U
Anthracene	ug/kg	U	U	203 J	U
Benzo(a) anthracene	ug/kg	U	U	237 J	U
Benzo(a) pyrene	ug/kg	163 J	U	226 J	U
Benzo(b) fluoranthene	ug/kg	222 J	174 J	283 J	U
Chrysene	ug/kg	160 J	U	225 J	U
Fluoranthene	ug/kg	277 J	264 J	581	200 J
Pyrene	ug/kg	286 J	307 J	582	273 J
Naphthalene	ug/kg	U	U	718	U
Phenanthrene	ug/kg	U	U	593	U
All other SVOCs	ug/kg	U	U	U	U
<b><u>VOCS*</u></b>					
All VOCs	ug/kg	U	U	U	U
<p>All data reported on a dry weight basis.</p> <p>* Samples analyzed by EPA Method 8260 Volatile Organics.</p> <p>Samples analyzed by EPA Method 8270</p> <p>U = Not Detected.</p> <p>J= Estimated concentration below quantitation limit.</p> <p>PAH = Poly Aromatic Hydrocarbons.</p> <p>SVOCs = Semi Volatile Organic Compounds.</p> <p>ug/kg = micrograms per kilogram or parts per billion.</p> <p>mg/kg = milligrams per kilogram or parts per million.</p> <p>VOCs = Volatile Organic Compounds.</p>					





PROJECT: 144 MONTELLO ST. - LEWISTON, ME		CLIENT: JOHN F. MURPHY HOMES, INC.	
TITLE: SITE PLAN		SCALE: 1" = 30'	DATE: 9 - 16 - 09
DRAIN BY: KRF		APPR BY: MAD	
640 Main Street Lewiston, Maine 04240 Tel: (207) 799-6009 Fax: (207) 799-6128		<b>SUMMIT</b> GEOENGINEERING SERVICES	
PROJ. # 16813		FIGURE: 1	

## APPENDIX A

### TEST PIT EXCAVATION LOGS AND PHOTOS

<b>SUMMIT</b> <b>ENVIRONMENTAL CONSULTANTS</b> 640 Main Street Lewiston, Maine 04240		<b>TEST PIT LOG</b>		Test Pit # <b>TP-A</b>
		Project: 144 Montello St.		16966
				Groundwater:
Contractor: Summit		Ground Surface Elevation:		
Equipment: Takeuchi TB-135		Reference:		
Summit Staff: Mike Deyling		Date: 10/6/2009	Weather: sunny 60 degrees	
Depth (ft)	<b>DESCRIPTION</b>			
	<b>ENGINEERING</b>		<b>GEOLOGIC/GENERAL</b>	
0.5	Gray fine sand and silt, few pieces of asphalt, rocks common (up to 12"),		FILL	
1.0				
1.5				
2.0	[grab sample at 2 ft for PAH analysis]			
2.5				
3.0			NATIVE SOIL SURFACE?	
3.5	gray silt, some fine sand organic layer, roots, branches, logs		SILT AND FINE SAND	
4.0				
4.5				
5.0	BOTTOM OF TEST PIT AT 5 FT			
5.5				
6.0				
6.5				
7.0				
7.5				
8.0				
8.5				
9.0				
9.5				
10.0				



<b>SUMMIT</b> ENVIRONMENTAL CONSULTANTS 640 Main Street Lewiston, Maine 04240		<b>TEST PIT LOG</b> Project: 144 Montello St.		Test Pit # <b>TP-B</b> 16966 Groundwater:
Contractor: Summit		Ground Surface Elevation:		
Equipment: Takeuchi TB-135		Reference:		
Summit Staff: Mike Deyling		Date: 10/6/2009	Weather: sunny 60 degrees	
Depth (ft)	<b>DESCRIPTION</b>			
	<b>ENGINEERING</b>		<b>GEOLOGIC/GENERAL</b>	
0.5	Gray fine sandy silt, some clay, no rocks		FILL	
1.0				
1.5				
2.0	[grab sample at 1.5 ft for PAH analysis]			
2.5				
3.0				
3.5	gray silt and clay, little fine sand organic layer, roots, branches, logs		GROUND WATER SEEPAGE AT 3 FT.  SILT AND CLAY, LITTLE FINE SAND	
4.0				
4.5				
5.0				
5.5				
6.0				
6.5				
7.0	BOTTOM OF TEST PIT AT 7 FT			
7.5				
8.0				
8.5				
9.0				
9.5				
10.0				

<b>SUMMIT</b> <b>ENVIRONMENTAL CONSULTANTS</b> 640 Main Street Lewiston, Maine 04240		<b>TEST PIT LOG</b>		Test Pit # <b>TP-C</b>
		Project: 144 Montello St.		16966
				Groundwater:
Contractor: Summit		Ground Surface Elevation:		
Equipment: Takeuchi TB-135		Reference:		
Summit Staff: Mike Deyling		Date: 10/6/2009	Weather: sunny 60 degrees	
Depth (ft)	<b>DESCRIPTION</b>			
	<b>ENGINEERING</b>		<b>GEOLOGIC/GENERAL</b>	
0.5	olive silt and fine sand		FILL	
1.0	miscellaneous debris (brick, asphalt, concrete) randomly throughout top 4.5 ft.		[grab sample at 1.0 ft for PAH analysis]	
1.5				
2.0				
2.5				
3.0				
3.5				
4.0			SILT AND CLAY, LITTLE FINE SAND	
4.5				
5.0	blue-gray clay, (wood log at 4.5 ft)		GROUND WATER SEEPAGE AT 4.5 FT.	
5.5			CLAY	
6.0				
6.5	BOTTOM OF TEST PIT AT 6 FT			
7.0				
7.5				
8.0				
8.5				
9.0				
9.5				
10.0				

<b>SUMMIT</b> <b>ENVIRONMENTAL CONSULTANTS</b> 640 Main Street Lewiston, Maine 04240		<b>TEST PIT LOG</b> Project: 144 Montello St.		Test Pit # <b>TP-D</b> 16966 Groundwater:
Contractor: Summit		Ground Surface Elevation:		
Equipment: Takeuchi TB-135		Reference:		
Summit Staff: Mike Deyling		Date: 10/6/2009	Weather: sunny 60 degrees	
Depth (ft)	<b>DESCRIPTION</b>			
	<b>ENGINEERING</b>		<b>GEOLOGIC/GENERAL</b>	
0.5	gray fine sand and silt		FILL	
1.0			[grab sample at 1.0 ft for PAH analysis]	
1.5				
2.0				
2.5				
3.0	black sand seam 2.5 to 3.0 ft		SAND	
3.5	brown sand, some silt		SAND AND SILT	
4.0			significant ground water seepage at 3.0 ft	
4.5				
5.0				
5.5	BOTTOM OF TEST PIT AT 5 FT			
6.0				
6.5				
7.0				
7.5				
8.0				
8.5				
9.0				
9.5				
10.0				



<b>SUMMIT</b> <b>ENVIRONMENTAL CONSULTANTS</b> 640 Main Street Lewiston, Maine 04240		<b>TEST PIT LOG</b>		Test Pit # <b>TP-E</b>
		Project: 144 Montello St.		16966
				Groundwater:
Contractor: Summit		Ground Surface Elevation:		
Equipment: Takeuchi TB-135		Reference:		
Summit Staff: Mike Deyling		Date: 10/6/2009	Weather: sunny 60 degrees	
Depth (ft)	<b>DESCRIPTION</b>			
	<b>ENGINEERING</b>		<b>GEOLOGIC/GENERAL</b>	
0.5	gray silt and silty clay, little sand		SILT AND CLAY FILL	
1.0			[grab sample at 1.0 ft for PAH analysis]	
1.5				
2.0				
2.5				
3.0				
3.5	organic layer, (branches, Vegetation, roots)		ORGANIC ground water seepage at 3.0 ft	
4.0	BOTTOM OF TEST PIT AT 4 FT			
4.5				
5.0				
5.5				
6.0				
6.5				
7.0				
7.5				
8.0				
8.5				
9.0				
9.5				
10.0				



## Architects & Engineers Claims Form

We work closely with our clients and their brokers to service claims efficiently and supportively. Clients will often turn first to their broker in the event of a claim, particularly for Lloyd's policies. If you have already contacted your broker, he or she will already be pursuing the claim on your behalf. If you have not, we invite you to complete the following brief form. We will ensure that your broker is informed of your communication.

Fields marked with an asterisk (\*) are required

- |  |   |
|--|---|
| 1. Name of insured: *  | Summit Environmental Consultants  |
| 2. Name of person completing this form: *                              | Michael Deyling   |
| 3. Phone number for person completing this form: *                     | (207) 795-6009  |
| 4. Email address of person completing this form: *                     | MDeyling@summitenv.com  |
| 5. Contact at insured (if different from above):                       | same  |
| 6. Phone number of contact (if different from above):                  | same  |
| 7. Beazley policy number beginning with a V or W: *                    | V150KE08PNPA  |
| 8. Full name of claimant against insured:                              | No claim filed as of this date  |
| 9. Date of alleged error or omission or potential circumstance: *      | 21 / April / 2009   |
| 10. Amount of alleged injury, if available:                            | unknown   |
| 11. Describe alleged events that gave rise to the current situation: * | Summit completed a septic system design for a small undeveloped lot on behalf of the owner. Owner or builder submitted plan as part of their building permit application. Town of |

When reporting a claim or lawsuit, we often require further documentation from our insured during the investigation.

- Copy of summons and complaint or claim letter  
Browse...
- Copy of subpoena  
Browse...
- Narrative summary explanation of client relationship, services provided, allegations made (Marked "Confidential" "Prepared in Anticipation of Litigation")  
Browse...

- |                                   |                  |
|-----------------------------------|------------------|
| 12. Name of broker for insured: * | Clark Associates |
|-----------------------------------|------------------|

### STATE REQUIRED FRAUD WARNINGS

ANY PERSON WHO, WITH INTENT TO DEFRAUD OR KNOWING THAT (S)HE IS FACILITATING A FRAUD AGAINST THE UNDERWRITER, SUBMITS AN APPLICATION OR FILES A CLAIM CONTAINING A FALSE OR DECEPTIVE STATEMENT MAY BE GUILTY OF INSURANCE FRAUD.

[View all state specific fraud warnings.](#)

Please note: After clicking submit you will need to verify the information entered and click submit again to send your request.

[Submit](#)   [Reset](#)

PHOTOS:



**Test Pit A**

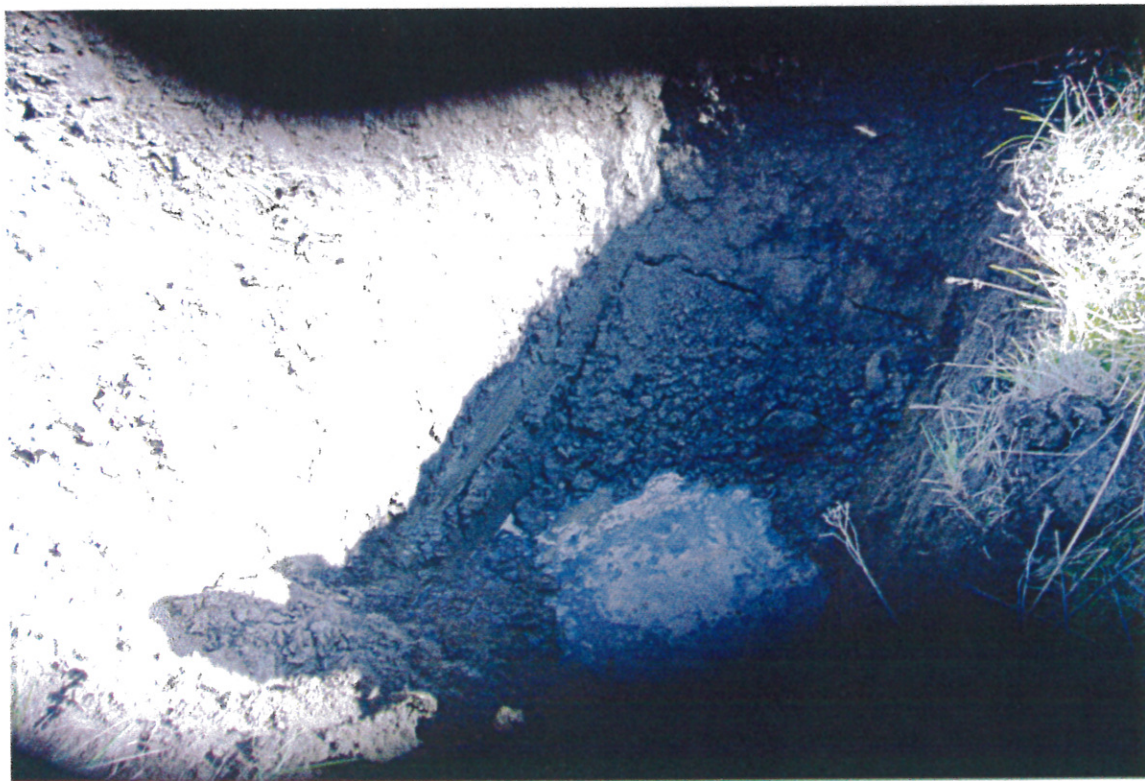


**Test Pit B**





**Test Pit C**



**Test Pit D**





**Test Pit E**

## APPENDIX B

### LABORATORY ANALYTICAL RESULTS





195 Commerce Way Suite E  
Portsmouth, New Hampshire 03801  
603-436-5111 Fax 603-430-2151  
800-929-9906  
www.analyticslab.com

Mr. Herb Kodis  
Maine Environmental Laboratory, Inc.  
PO Box 1107  
Yarmouth, ME 04096-1107

Report Number: 64916

Revision: Rev. 0

Re: SME 862-09

Enclosed are the results of the analyses on your sample(s). Samples were received on 08 October 2009 and analyzed for the tests listed below. Samples were received in acceptable condition, with the exceptions noted below or on the chain of custody. These results pertain to samples as received by the laboratory and for the analytical tests requested on the chain of custody. The results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. Please see individual reports for specific methodologies and references.

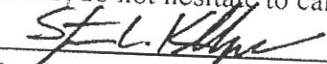
Lab Number	Sample Date	Station Location	Analysis	Comments
64916-1	10/06/09	TP-A	EPA 8270 (PAH only)	
64916-2	10/06/09	TP-B	EPA 8270 (PAH only)	
64916-3	10/06/09	TP-C	EPA 8270 (PAH only)	
64916-4	10/06/09	TP-D	EPA 8270 (PAH only)	
64916-5	10/06/09	TP-E	EPA 8270 (PAH only)	
64916-6	10/06/09	BK-SS-1	EPA 8270 (PAH only)	

Sample Receipt Exceptions: None

Analytics Environmental Laboratory is certified by the states of New Hampshire, Maine, Massachusetts, Connecticut, Rhode Island, New York, Virginia, Maryland, and is validated by the U.S. Navy (NFESC). A list of actual certified parameters is available upon request.

If you have any further question on the analytical methods or these results, do not hesitate to call.

Authorized signature

  
Stephen L. Knollmeyer Lab. Director

Date

10/19/2009

This report shall not be reproduced, except in full, without the written consent of Analytics Environmental Laboratory, LLC.

Mr. Herb Kodis  
Maine Environmental Laboratory, Inc.  
PO Box 1107  
Yarmouth, ME 04096-1107

October 17, 2009

**SAMPLE DATA**

**CLIENT SAMPLE ID**  
**Project Name:** SME 862-09  
**Project Number:**  
**Field Sample ID:** TP-A

**Lab Sample ID:** 64916-1  
**Matrix:** Solid  
**Percent Solid:** 91  
**Dilution Factor:** 2.2  
**Collection Date:** 10/06/09  
**Lab Receipt Date:** 10/08/09  
**Extraction Date:** 10/13/09  
**Analysis Date:** 10/16/09

ANALYTICAL RESULTS SEMI-VOLATILE ORGANICS		
COMPOUND	Quantitation Limit µg/kg	Result µg/kg
Naphthalene	580	U
Acenaphthylene	580	1930
Acenaphthene	580	U
Fluorene	580	396 J
Phenanthrene	580	5030
Anthracene	580	978
Fluoranthene	580	7380
Pyrene	580	8370
Benzo[a]anthracene	580	3370
Chrysene	580	4490
Benzo[b] fluoranthene	580	4860
Benzo[k] fluoranthene	580	1510
Benzo[a] pyrene	580	3810
Dibenz [a,h] anthracene	580	492 J
Benzo( g,h,i) perylene	580	1910
Indeno [1,2,3-cd] pyrene	580	1980
2-Methylnaphthalene	580	U
<b>Surrogate Standard Recovery</b>		
d5-nitrobenzene	73 %	2-Fluorobiphenyl 82 %
		d14-p-terphenyl 78 %

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in

METHODOLOGY: Sample analysis was conducted according to: Test Methods for Evaluating Solid Waste, SW-846 Method 8270C.

COMMENTS: Results are expressed on a dry weight basis.

*[Signature]*

Mr. Herb Kodis  
Maine Environmental Laboratory, Inc.  
PO Box 1107  
Yarmouth, ME 04096-1107

October 17, 2009

**SAMPLE DATA**

**CLIENT SAMPLE ID**  
**Project Name:** SME 862-09  
**Project Number:**  
**Field Sample ID:** TP-B

**Lab Sample ID:** 64916-2  
**Matrix:** Solid  
**Percent Solid:** 83  
**Dilution Factor:** 1.2  
**Collection Date:** 10/06/09  
**Lab Receipt Date:** 10/08/09  
**Extraction Date:** 10/13/09  
**Analysis Date:** 10/16/09

ANALYTICAL RESULTS SEMI-VOLATILE ORGANICS		
COMPOUND	Quantitation Limit µg/kg	Result µg/kg
Naphthalene	310	U
Acenaphthylene	310	U
Acenaphthene	310	U
Fluorene	310	U
Phenanthrene	310	166 J
Anthracene	310	U
Fluoranthene	310	321
Pyrene	310	353
Benzo[a]anthracene	310	170 J
Chrysene	310	192 J
Benzo[b] fluoranthene	310	U
Benzo[k] fluoranthene	310	U
Benzo[a] pyrene	310	176 J
Dibenz [a,h] anthracene	310	U
Benzo( g,h,i) perylene	310	U
Indeno [1,2,3-cd] pyrene	310	U
2-Methylnaphthalene	310	U
<b>Surrogate Standard Recovery</b>		
d5-nitrobenzene	59 %	2-Fluorobiphenyl 68 %
		d14-p-terphenyl 77 %

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in

METHODOLOGY: Sample analysis was conducted according to: Test Methods for Evaluating Solid Waste, SW-846 Method 8270C.

COMMENTS: Results are expressed on a dry weight basis.



Mr. Herb Kodis  
Maine Environmental Laboratory, Inc.  
PO Box 1107  
Yarmouth, ME 04096-1107

October 17, 2009

**SAMPLE DATA**

**CLIENT SAMPLE ID**  
**Project Name:** SME 862-09  
**Project Number:**  
**Field Sample ID:** TP-C

**Lab Sample ID:** 64916-3  
**Matrix:** Solid  
**Percent Solid:** 92  
**Dilution Factor:** 5  
**Collection Date:** 10/06/09  
**Lab Receipt Date:** 10/08/09  
**Extraction Date:** 10/13/09  
**Analysis Date:** 10/16/09

Analysis Date: 10/16/09

ANALYTICAL RESULTS SEMI-VOLATILE ORGANICS		
COMPOUND	Quantitation Limit µg/kg	Result µg/kg
Naphthalene	1400	U
Acenaphthylene	1400	3280
Acenaphthene	1400	U
Fluorene	1400	1110 J
Phenanthrene	1400	14100
Anthracene	1400	2380
Fluoranthene	1400	20000
Pyrene	1400	21200
Benzo[a]anthracene	1400	8080
Chrysene	1400	10200
Benzo[b] fluoranthene	1400	11000
Benzo[k] fluoranthene	1400	4080
Benzo[a] pyrene	1400	8580
Dibenz [a,h] anthracene	1400	983 J
Benzo( g,h,i) perylene	1400	3550
Indeno [1,2,3-cd] pyrene	1400	4180
2-Methylnaphthalene	1400	U
<u>Surrogate Standard Recovery</u>		
d5-nitrobenzene	65 %	2-Fluorobiphenyl
		71 %
		d14-p-terphenyl
		78 %

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in

METHODOLOGY: Sample analysis was conducted according to: Test Methods for Evaluating Solid Waste, SW-846 Method 8270C.

COMMENTS: Results are expressed on a dry weight basis.

Mr. Herb Kodis  
Maine Environmental Laboratory, Inc.  
PO Box 1107  
Yarmouth, ME 04096-1107

October 17, 2009

**SAMPLE DATA**

**CLIENT SAMPLE ID**  
**Project Name:** SME 862-09  
**Project Number:**  
**Field Sample ID:** TP-D

**Lab Sample ID:** 64916-4  
**Matrix:** Solid  
**Percent Solid:** 84  
**Dilution Factor:** 1.2  
**Collection Date:** 10/06/09  
**Lab Receipt Date:** 10/08/09  
**Extraction Date:** 10/13/09  
**Analysis Date:** 10/16/09

Analysis Date: 10/16/09

ANALYTICAL RESULTS SEMI-VOLATILE ORGANICS		
COMPOUND	Quantitation Limit µg/kg	Result µg/kg
Naphthalene	310	U
Acenaphthylene	310	U
Acenaphthene	310	U
Fluorene	310	U
Phenanthrene	310	U
Anthracene	310	U
Fluoranthene	310	218 J
Pyrene	310	283 J
Benzo[a]anthracene	310	164 J
Chrysene	310	179 J
Benzo[b] fluoranthene	310	173 J
Benzo[k] fluoranthene	310	U
Benzo[a] pyrene	310	182 J
Dibenz [a,h] anthracene	310	U
Benzo( g,h,i) perylene	310	U
Indeno [1,2,3-cd] pyrene	310	U
2-Methylnaphthalene	310	U
<u>Surrogate Standard Recovery</u>		
d5-nitrobenzene	64 %	2-Fluorobiphenyl
		72 %
		d14-p-terphenyl
		83 %

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in

METHODOLOGY: Sample analysis was conducted according to: Test Methods for Evaluating Solid Waste, SW-846 Method 8270C.

COMMENTS: Results are expressed on a dry weight basis.

Mr. Herb Kodis  
Maine Environmental Laboratory, Inc.  
PO Box 1107  
Yarmouth, ME 04096-1107

October 17, 2009

**SAMPLE DATA**

**CLIENT SAMPLE ID**  
**Project Name:** SME 862-09  
**Project Number:**  
**Field Sample ID:** TP-E

**Lab Sample ID:** 64916-5  
**Matrix:** Solid  
**Percent Solid:** 82  
**Dilution Factor:** 1.2  
**Collection Date:** 10/06/09  
**Lab Receipt Date:** 10/08/09  
**Extraction Date:** 10/13/09  
**Analysis Date:** 10/16/09

ANALYTICAL RESULTS SEMI-VOLATILE ORGANICS					
COMPOUND		Quantitation Limit µg/kg	Result µg/kg		
Naphthalene		320	U		
Acenaphthylene		320	U		
Acenaphthene		320	U		
Fluorene		320	U		
Phenanthrene		320	161 J		
Anthracene		320	U		
Fluoranthene		320	325		
Pyrene		320	372		
Benzo[a]anthracene		320	165 J		
Chrysene		320	209 J		
Benzo[b] fluoranthene		320	U		
Benzo[k] fluoranthene		320	U		
Benzo[a] pyrene		320	180 J		
Dibenz [a,h] anthracene		320	U		
Benzo( g,h,i) perylene		320	U		
Indeno [1,2,3-cd] pyrene		320	U		
2-Methylnaphthalene		320	U		
<u>Surrogate Standard Recovery</u>					
d5-nitrobenzene	66 %	2-Fluorobiphenyl	70 %	d14-p-terphenyl	88 %

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in

METHODOLOGY: Sample analysis was conducted according to: Test Methods for Evaluating Solid Waste, SW-846 Method 8270C.

COMMENTS: Results are expressed on a dry weight basis.



Mr. Herb Kodis  
Maine Environmental Laboratory, Inc.  
PO Box 1107  
Yarmouth, ME 04096-1107

October 17, 2009

**SAMPLE DATA**

Lab Sample ID: 64916-6  
Matrix: Solid  
Percent Solid: 67  
Dilution Factor: 1.4  
Collection Date: 10/06/09  
Lab Receipt Date: 10/08/09  
Extraction Date: 10/13/09  
Analysis Date: 10/14/09

**CLIENT SAMPLE ID**

Project Name: SME 862-09

Project Number:

Field Sample ID: BK-SS-1

**ANALYTICAL RESULTS SEMI-VOLATILE ORGANICS**

COMPOUND	Quantitation Limit µg/kg	Result µg/kg
Naphthalene	390	U
Acenaphthylene	390	U
Acenaphthene	390	U
Fluorene	390	U
Phenanthrene	390	U
Anthracene	390	U
Fluoranthene	390	U
Pyrene	390	U
Benzo[a]anthracene	390	U
Chrysene	390	U
Benzo[b]fluoranthene	390	U
Benzo[k]fluoranthene	390	U
Benzo[a]pyrene	390	U
Dibenz[a,h]anthracene	390	U
Benzo[g,h,i]perylene	390	U
Indeno[1,2,3-cd]pyrene	390	U
2-Methylnaphthalene	390	U

**Surrogate Standard Recovery**

d5-nitrobenzene 60 %      2-Fluorobiphenyl 69 %      d14-p-terphenyl 87 %

U=Undetected    J=Estimated    E=Exceeds Calibration Range    B=Detected in

METHODOLOGY: Sample analysis was conducted according to: Test Methods for Evaluating Solid Waste, SW-846 Method 8270C.

COMMENTS: Results are expressed on a dry weight basis.

One Main Street Yarmouth, Maine 04096-6716 (207) 846-6569 fax: (207) 846-9066  
e-mail: melab@maine.rr.com

M. Deyling  
COMPANY

FAX # / E-MAIL

PURCHASE ORDER # / BILL TO

PROJECT NAME

SME 862-09

SAMPLER NAME

M. Deuling

[illegible]

RELINQUISHED BY:

DATE	TIME
10/8/09	110

COMMENTS

RECEIVED BY:

RECEIVED BY:

RECEIVED BY LABORATORY: Law

Labels checked by CR 10/8/09

LABORATORY: David M. Mervin

COC-04

Analytics Report 64916 page 0008 of 8

# Analyses

Maine Environmental Laboratory - Chain of Custody  
 One Main Street Yarmouth, Maine 04096-6716 (207) 846-6569 fax: (207) 846-9066  
 email: melab@maine.rr.com

Project Manager: **Mike Deyling** Telephone: **795-6009** Fax/E-Mail: **16813**

Company: **Summit Env. Cons.** Purchase Order #/Bill To: **16813**

Address: **640 Main St Lewiston**

Project Name: **144 Montello** Sampler Name: **Mike Deyling**

Sample Identification	# Containers	Container Type	Field Filtration (Yes or No)	Sample Matrix	Grab	Composite	Method Preserved	Sampling Date/Time	PAHs	Laboratory Request
TP-A	1	grab		Sei 1	X		None	10/10/09 9:30	X	Standard X
TP-B	1				X			10:00	X	Priority
TP-C	1				X			10:15	X	Quote #
TP-D	1				X			10:45	X	Laboratory Identification/ Subcontractor
TP-E	1				X			11:15	X	
BK-SS-1	1				X			11:30	X	

Received in hold time ☒ Yes ☐ no ☐ N/A

Received in good condition ☒ Yes ☐ no ☐ N/A

Temp. Blank °C \_\_\_\_\_ /Frozen ice packs \_\_\_\_\_

Samples received preserved ☒ Yes ☐ no ☐ N/A

Relinquished by Sampler: **Mike Deyling** Date: **10/16** Time: **3:00** Received by: **Bruce 388**

Relinquished by: **Mike Deyling** Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_

Relinquished by: **Bruce 388** Date: **10/16/09** Time: **3:07** Received by Laboratory: **[Signature]**





# Maine Environmental Laboratory

## Report of Analyses

One Main Street Yarmouth, Maine 04096-1107 Tel (207) 846-6569 Fax (207) 846-9066 e-mail: melab@maine.rr.com

Mike Deyling  
Summit Environmental Consultants, Inc.  
640 Main Street  
Lewiston, ME 04240

August 04, 2009  
Page 1 of 5

Report No.: SME833-09

Enclosed are the results of the analyses requested on your samples as received by the laboratory. Samples were received in acceptable condition and analyzed within method holding times with all quality control data within laboratory acceptance limits unless noted. Reporting detection limits are the minimum levels for reporting quantitative data. These limits are 3.18 times the method detection limit as defined in CFR 40 Part 136, Appendix B. Data reported between the reporting and method detection limits are J flagged (estimated). Maine Environmental Laboratory is certified by Maine (cert. #200904) and New Hampshire NELAP (NHCLAP) (cert. #2031). A list of certified parameters is available on request. The results reported herein conform to the most current NELAP standards, where applicable, unless otherwise narrated in the report. This report shall not be reproduced, except in full, without the written consent of the laboratory.

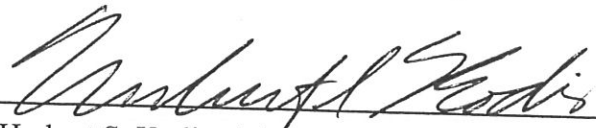
The complete report consists of the following sections:

Maine Environmental Laboratory report  
Chain of custody form  
Analytics Environmental Laboratory report

### References

EPA - EPA600/4-79-020, Methods for Chemical Analysis of Water and Wastes, USEPA, Cincinnati, Ohio, March 1983.  
SW8 - SW846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, USEPA, third edition, 1986.  
STM - Standard Methods for the Examination of Water and Wastewater, 18th edition, APHA, AWWA, WPCF, 1992.  
CLP - USEPA CLP Statement of Work for Inorganics, ILMO3.0.  
AOA - Official Methods of Analysis of the Association of Official Analytical Chemists, 14th edition, 1984.

Authorized signature

  
Herbert S. Kodis, laboratory director

# Maine Environmental Laboratory

## Report of Analyses

One Main Street Yarmouth, Maine 04096-1107 Tel (207) 846-6569 Fax (207) 846-9066 e-mail: melab@maine.rr.com

Mike Deyling  
Summit Environmental Consultants, Inc.  
640 Main Street  
Lewiston, ME 04240

Page 2 of 5

August 04, 2009

Report No: SME833-09  
Date received: 07/24/09  
Project ID: 144 Montello Phase II  
Laboratory ID: SME83309-01

Sampler: R. Mocciola  
Sampling date: 07/23/09  
Sample matrix: Soil  
Sample ID: TP 2B

Data reported on a dry weight basis.

Parameter	Results	units	Date Analyzed	Method Detection Limit	Reporting Detection Limit	Method	Reference
Arsenic, total	12.3	mg/kg	08/03/09	0.4	1.2	3050B/6010B	SW8
Barium, total	66	mg/kg	08/03/09	1	4	3050B/6010B	SW8
Cadmium, total	ND	mg/kg	08/03/09	0.4	1.2	3050B/6010B	SW8
Chromium, total	34	mg/kg	08/03/09	1	4	3050B/6010B	SW8
Lead, total	12	mg/kg	08/03/09	1	4	3050B/6010B	SW8
Mercury, total	0.09	mg/kg	08/04/09	0.02	0.06	7471A	SW8
Selenium, total	3.4	mg/kg	08/03/09	0.4	1.2	3050B/6010B	SW8
Silver, total	ND	mg/kg	08/03/09	0.4	1.2	3050B/6010B	SW8
Total Solids	80.44	%	07/28/09	0.01		CLP 4F	CLP

ND = not detected J = estimated B = detected in blank S = RDL increased due to sample matrix

# Maine Environmental Laboratory

## Report of Analyses

One Main Street Yarmouth, Maine 04096-1107 Tel (207) 846-6569 Fax (207) 846-9066 e-mail: melab@maine.rr.com

Mike Deyling  
Summit Environmental Consultants, Inc.  
640 Main Street  
Lewiston, ME 04240

Page 3 of 5

August 04, 2009

Report No: SME833-09 Sampler: R. Mocchiola  
Date received: 07/24/09 Sampling date: 07/23/09  
Project ID: 144 Montello Phase II Sample matrix: Soil  
Laboratory ID: SME83309-02 Sample ID: TP 3A

Data reported on a dry weight basis.

Parameter	Results	units	Date Analyzed	Method Detection Limit	Reporting Detection Limit	Method	Reference
Arsenic, total	11.5	mg/kg	08/03/09	0.4	1.2	3050B/6010B	SW8
Barium, total	52	mg/kg	08/03/09	1	4	3050B/6010B	SW8
Cadmium, total	ND	mg/kg	08/03/09	0.4	1.2	3050B/6010B	SW8
Chromium, total	28	mg/kg	08/03/09	1	4	3050B/6010B	SW8
Lead, total	16	mg/kg	08/03/09	1	4	3050B/6010B	SW8
Mercury, total	0.05 J	mg/kg	08/04/09	0.02	0.06	7471A	SW8
Selenium, total	2.9	mg/kg	08/03/09	0.4	1.2	3050B/6010B	SW8
Silver, total	ND	mg/kg	08/03/09	0.4	1.2	3050B/6010B	SW8
Total Solids	80.93	%	07/28/09	0.01		CLP 4F	CLP

ND = not detected J = estimated B = detected in blank S = RDL increased due to sample matrix



# Maine Environmental Laboratory

## Report of Analyses

One Main Street Yarmouth, Maine 04096-1107 Tel (207) 846-6569 Fax (207) 846-9066 e-mail: melab@maine.rr.com

Mike Deyling  
Summit Environmental Consultants, Inc.  
640 Main Street  
Lewiston, ME 04240

Page 4 of 5

August 04, 2009

Report No: SME833-09  
Date received: 07/24/09  
Project ID: 144 Montello Phase II  
Laboratory ID: SME83309-03

Sampler: R. Mocchiola  
Sampling date: 07/23/09  
Sample matrix: Soil  
Sample ID: TP 5A

Data reported on a dry weight basis.

Parameter	Results	units	Date Analyzed	Method Detection Limit	Reporting Detection Limit	Method	Reference
Arsenic, total	6.6	mg/kg	08/03/09	0.4	1.2	3050B/6010B	SW8
Barium, total	57	mg/kg	08/03/09	1	4	3050B/6010B	SW8
Cadmium, total	ND	mg/kg	08/03/09	0.4	1.2	3050B/6010B	SW8
Chromium, total	31	mg/kg	08/03/09	1	4	3050B/6010B	SW8
Lead, total	13	mg/kg	08/03/09	1	4	3050B/6010B	SW8
Mercury, total	0.09	mg/kg	08/04/09	0.02	0.06	7471A	SW8
Selenium, total	3.4	mg/kg	08/03/09	0.4	1.2	3050B/6010B	SW8
Silver, total	ND	mg/kg	08/03/09	0.4	1.2	3050B/6010B	SW8
Total Solids	81.73	%	07/28/09	0.01		CLP 4F	CLP

ND = not detected J = estimated B = detected in blank S = RDL increased due to sample matrix

# Maine Environmental Laboratory

## Report of Analyses

One Main Street Yarmouth, Maine 04096-1107 Tel (207) 846-6569 Fax (207) 846-9066 e-mail: melab@maine.rr.com

Mike Deyling  
Summit Environmental Consultants, Inc.  
640 Main Street  
Lewiston, ME 04240

Page 5 of 5

August 04, 2009

Report No: SME833-09  
Date received: 07/24/09  
Project ID: 144 Montello Phase II  
Laboratory ID: SME83309-04

Sampler: R. Mocchiola  
Sampling date: 07/23/09  
Sample matrix: Soil  
Sample ID: TP 6A

Data reported on a dry weight basis.

Parameter	Results	units	Date Analyzed	Method Detection Limit	Reporting Detection Limit	Method	Reference
Arsenic, total	6.3	mg/kg	08/03/09	0.4	1.2	3050B/6010B	SW8
Barium, total	61	mg/kg	08/03/09	1	4	3050B/6010B	SW8
Cadmium, total	ND	mg/kg	08/03/09	0.4	1.2	3050B/6010B	SW8
Chromium, total	35	mg/kg	08/03/09	1	4	3050B/6010B	SW8
Lead, total	12	mg/kg	08/03/09	1	4	3050B/6010B	SW8
Mercury, total	0.08	mg/kg	08/04/09	0.02	0.06	7471A	SW8
Selenium, total	2.6	mg/kg	08/03/09	0.4	1.2	3050B/6010B	SW8
Silver, total	ND	mg/kg	08/03/09	0.4	1.2	3050B/6010B	SW8
Total Solids	80.62	%	07/28/09	0.01		CLP 4F	CLP

ND = not detected J = estimated B = detected in blank S = RDL increased due to sample matrix

# MAINE ENVIRONMENTAL LABORATORY- Chain of Custody

One Main Street Yarmouth, Maine 04096-6716 (207) 846-6569 fax: (207) 846-9066  
e-mail: melab@maine.rr.com

PROJECT MANAGER

MIKE DEXLER

TELEPHONE

795-6009

FAX # / E-MAIL

COMPANY

Summit

PURCHASE ORDER # / BILL TO

ADDRESS

640 Main St.

PROJECT NAME

199 Montello Phase II

SAMPLER NAME

Ronnie Maciada

SAMPLE IDENTIFICATION

TP 2-B

"

"

TP 3A

↓

TP 5A

↓

TP 6A

↓

# CONTAINERS

TYPE OF CONTAINERS

FIELD FILTRATION

YES NO

SAMPLE MATRIX

COMP.

METHOD PRESERVED

SAMPLING DATE

TIME

0900

↓

↓

↓

↓

↓

↓

↓

↓

↓

↓

↓

↓

↓

↓

↓

↓

↓

↓

↓

↓

↓

↓

↓

↓

↓

↓

↓

↓

↓

↓

↓

↓

↓

↓

↓

↓

↓

↓

↓

↓

↓

↓

↓

↓

Received within hold time

Received in good condition

Temp. Blank °C 3.2 / Frozen ice packs

Samples received preserved

RELINQUISHED BY SAMPLER: *an 7-27*

RELINQUISHED BY:

RELINQUISHED BY:

RELINQUISHED BY:

RELINQUISHED BY:

RELINQUISHED BY:

RELINQUISHED BY:

RELINQUISHED BY:

RELINQUISHED BY:

RELINQUISHED BY:

RELINQUISHED BY:

RELINQUISHED BY:

ANALYSES

LABORATORY REPORT #

SME 833-09

Delivered by

ELM

TURNAROUND REQUEST

Standard

Priority (SURCHARGE)

8/14

Quote #

COMMENTS

No EDD as per R.N. 7/24/04

RECEIVED BY:

RECEIVED BY:

RECEIVED BY:

RECEIVED BY:

RECEIVED BY:

RECEIVED BY:

RECEIVED BY:

RECEIVED BY:

RECEIVED BY:

RECEIVED BY:

RECEIVED BY:

Mr. Herb Kodis  
Maine Environmental Laboratory, Inc.  
PO Box 1107  
Yarmouth, ME 04096-1107

Report Number: 64386

Revision: Rev. 0

Re: SME 833-09

Enclosed are the results of the analyses on your sample(s). Samples were received on 24 July 2009 and analyzed for the tests listed below. Samples were received in acceptable condition, with the exceptions noted below or on the chain of custody. These results pertain to samples as received by the laboratory and for the analytical tests requested on the chain of custody. The results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. Please see individual reports for specific methodologies and references.

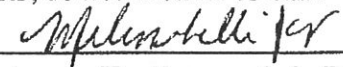
<u>Lab Number</u>	<u>Sample Date</u>	<u>Station Location</u>	<u>Analysis</u>	<u>Comments</u>
64386-1	07/23/09	TP 2-B	EPA 8260 Volatile Organics	
	07/23/09	TP 2-B	EPA 8270 Acid/Base Neutrals	
64386-2	07/23/09	TP 3A	EPA 8260 Volatile Organics	
	07/23/09	TP 3A	EPA 8270 Acid/Base Neutrals	
64386-3	07/23/09	TP-5A	EPA 8260 Volatile Organics	
	07/23/09	TP-5A	EPA 8270 Acid/Base Neutrals	
64386-4	07/23/09	TP-6A	EPA 8260 Volatile Organics	
	07/23/09	TP-6A	EPA 8270 Acid/Base Neutrals	

Sample Receipt Exceptions: None

Analytics Environmental Laboratory is certified by the states of New Hampshire, Maine, Massachusetts, Connecticut, Rhode Island, New York, Virginia, Maryland, and is validated by the U.S. Navy (NFESC). A list of actual certified parameters is available upon request.

If you have any further question on the analytical methods or these results, do not hesitate to call.

Authorized signature

  
Stephen L. Knollmeyer Lab. Director

Date

08/05/09

This report shall not be reproduced, except in full, without the written  
consent of Analytics Environmental Laboratory, LLC.



Mr. Herb Kodis  
Maine Environmental Laboratory, Inc.  
PO Box 1107  
Yarmouth, ME 04096-1107

August 3, 2009

**SAMPLE DATA**

**CLIENT SAMPLE ID**  
**Project Name:** SME 833-09  
**Project Number:**  
**Field Sample ID:** TP 2-B

**Lab Sample ID:** 64386-1  
**Matrix:** Solid  
**Percent Solid:** 81  
**Dilution Factor:** 125  
**Collection Date:** 07/23/09  
**Lab Receipt Date:** 07/24/09  
**Analysis Date:** 07/27/09

ANALYTICAL RESULTS VOLATILE ORGANICS					
COMPOUND	Quantitation Limit $\mu\text{g/kg}$	Result $\mu\text{g/kg}$	COMPOUND	Quantitation Limit $\mu\text{g/kg}$	Result $\mu\text{g/kg}$
Benzene	125	U	1,3-Dichloropropane	125	U
Bromobenzene	125	U	cis-1,3-Dichloropropene	125	U
Bromochloromethane	125	U	trans-1,3-Dichloropropene	125	U
Bromodichloromethane	94	U	2,2-Dichloropropane	125	U
Bromoform	94	U	1,1-Dichloropropene	125	U
Bromomethane	125	U	Ethylbenzene	125	U
n-butylbenzene	125	U	Hexachlorobutadiene	125	U
sec-butylbenzene	125	U	Isopropylbenzene	125	U
tert-butylbenzene	125	U	p-isopropyltoluene	125	U
Carbon Tetrachloride	125	U	Methylene Chloride	625	U
Chlorobenzene	125	U	Methyl-tert-butyl ether (MTBE)	94	U
Chloroethane	125	U	Naphthalene	125	U
Chloroform	94	U	n-Propylbenzene	125	U
Chloromethane	125	U	Styrene	125	U
2-Chlorotoluene	125	U	1,1,1,2-Tetrachloroethane	125	U
4-Chlorotoluene	125	U	1,1,2,2-Tetrachloroethane	94	U
Dibromochloromethane	94	U	Tetrachloroethene	125	U
1,2-Dibromo-3-chloropropane	125	U	Toluene	125	U
1,2-Dibromoethane	94	U	1,2,3-Trichlorobenzene	125	U
Dibromomethane	125	U	1,2,4-Trichlorobenzene	125	U
1,2-Dichlorobenzene	125	U	1,1,1-Trichloroethane	125	U
1,3-Dichlorobenzene	125	U	1,1,2-Trichloroethane	94	U
1,4-Dichlorobenzene	125	U	Trichloroethene	125	U
Dichlorodifluoromethane	125	U	Trichlorofluoromethane	125	U
1,1-Dichloroethane	125	U	1,2,3-Trichloropropane	125	U
1,2-Dichloroethane	94	U	1,2,4-Trimethylbenzene	125	U
1,1-Dichloroethene	94	U	1,3,5-Trimethylbenzene	125	U
cis-1,2-Dichloroethene	125	U	Vinyl Chloride	125	U
trans-1,2-Dichloroethene	125	U	o-Xylene	125	U
1,2-Dichloropropane	94	U	m,p-Xylene	125	U
Acetone	1250	U	Diethyl ether	125	U
Carbon Disulfide	125	U	2-Hexanone	1250	U
Tetrahydrofuran	625	U	Methyl isobutyl ketone	1250	U
Methyl ethyl ketone	1250	U	Di-isopropyl ether (DIPE)	125	U
t-Butyl alcohol (TBA)	2500	U	Ethyl t-butyl ether (ETBE)	125	U
t-Amyl methyl ether (TAME)	125	U	1,3,5-Trichlorobenzene	125	U
Surrogate Standard Recovery					
d4-1,2-Dichloroethane	87 %		d8-Toluene	84 %	
			Bromofluorobenzene	86 %	
U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank					

**METHODOLOGY:** Sample analysis was conducted according to: Test Methods for Evaluating Solid Waste, SW-846 Method 8260B.

**COMMENTS:** Results are expressed on a dry weight basis. Sample collection and analysis in accordance with SW-846 method 5035A.

*M. Leibel*

Mr. Herb Kodis  
Maine Environmental Laboratory, Inc.  
PO Box 1107  
Yarmouth, ME 04096-1107

August 4, 2009

**SAMPLE DATA**

**CLIENT SAMPLE ID**

Project Name: SME 833-09

Project Number:

Field Sample ID: TP 2-B

Lab Sample ID: 64386-1  
Matrix: Solid  
Percent Solid: 81  
Dilution Factor: 1.2  
Collection Date: 07/23/09  
Lab Receipt Date: 07/24/09  
Extraction Date: 07/31/09  
Analysis Date: 08/02/09

PAGE ONE

ANALYTICAL RESULTS SEMI-VOLATILE ORGANICS					
ACID COMPOUND	Quantitation Limit µg/kg	Result µg/kg	ACID COMPOUND	Quantitation Limit µg/kg	Result µg/kg
2-Chlorophenol	420	U	Pentachlorophenol	840	U
4-Chloro-3-methylphenol	840	U	Phenol	840	U
2,4-Dichlorophenol	420	U	2,4,5-Trichlorophenol	600	U
2,4-Dimethylphenol	420	U	2,4,6-Trichlorophenol	420	U
2,4-dinitrophenol	840	U	Benzoic Acid	1200	U
4,6-Dinitro-2-methylphenol	840	U	2-Methylphenol	840	U
2-Nitrophenol	840	U	3+4-Methylphenol	840	U
2,6-Dichlorophenol	600	U	Benzyl Alcohol	840	U
4-Nitrophenol	840	U	2,3,4,6-Tetrachlorophenol	840	U
Acid Surrogate Standard Recovery					
2-Fluorophenol	57 %	d5-Phenol	61 %	2,4,6-Tribromophenol	76 %
BASE NEUTRAL COMPOUND	Quantitation Limit µg/kg	Result µg/kg	BASE NEUTRAL COMPOUND	Quantitation Limit µg/kg	Result µg/kg
1,2-Dichlorobenzene	600	U	Hexachlorobenzene	420	U
1,3-Dichlorobenzene	600	U	* Benzidine	600	U
1,4-Dichlorobenzene	420	U	3,3'-Dichlorobenzidine	600	U
2,4-Dinitrotoluene	420	U	Azobenzene	600	U
2,6-Dinitrotoluene	600	U	Bis(2-chloroethoxy)methane	600	U
Nitrobenzene	600	U	bis(2-chloroethyl) ether	420	U
Hexachlorobutadiene	600	U	bis(2-chloroisopropyl)ether	420	U
Dimethyl Phthalate	600	U	4-bromophenyl phenyl ether	600	U
Di-n-butyl phthalate	600	U	Butyl benzyl phthalate	600	U
di-n-octyl-phthalate	600	U	4-Chlorophenyl phenyl ether	600	U
Bis (2-ethylhexyl) phthalate	600	U	Diethyl Phthalate	600	U
1,2,4-Trichlorobenzene	600	U	Hexachlorocyclopentadiene	600	U
U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in					

**METHODOLOGY:** Sample analysis was conducted according to: Test Methods for Evaluating Solid Waste, SW-846 Method 8270C.

*[Signature]*

Mr. Herb Kodis  
Maine Environmental Laboratory, Inc.  
PO Box 1107  
Yarmouth, ME 04096-1107

August 4, 2009

**SAMPLE DATA**

**CLIENT SAMPLE ID**

Project Name: SME 833-09

Project Number:

Field Sample ID: TP 2-B

Lab Sample ID: 64386-1  
Matrix: Solid  
Percent Solid: 81  
Dilution Factor: 1.2  
Collection Date: 07/23/09  
Lab Receipt Date: 07/24/09  
Extraction Date: 07/31/09  
Analysis Date: 08/02/09

PAGE TWO

ANALYTICAL RESULTS SEMI-VOLATILE ORGANICS					
BASE NEUTRAL COMPOUND	Quantitation Limit µg/kg	Result µg/kg	BASE NEUTRAL COMPOUND	Quantitation Limit µg/kg	Result µg/kg
Acenaphthene	320	U	N-nitrosodimethylamine	600	U
Acenaphthylene	320	U	N-nitroso-di-n-propylamine	600	U
Anthracene	320	U	n-nitrosodiphenylamine	600	U
Benzo[a]anthracene	320	U	Pyridine	600	U
Benzo[a] pyrene	320	163 J	2-Methylnaphthalene	320	U
Benzo[b] fluoranthene	320	222 J	2-Chloronaphthalene	320	U
Benzo[k] fluoranthene	320	U	Naphthalene	320	U
Benzo( g,h,i) perylene	320	U	Phenanthrene	320	U
Chrysene	320	160 J	Dibenzofuran	320	U
Dibenz [a,h] anthracene	320	U	Aniline	600	U
Fluoranthene	320	277 J	4-Chloroaniline	600	U
Fluorene	320	U	2-Nitroaniline	600	U
Indeno [1,2,3-cd] pyrene	320	U	3-Nitroaniline	600	U
Pyrene	320	286 J	4-Nitroaniline	600	U
Hexachloroethane	420	U	Carbazole	320	U
Isophorone	600	U			
Base Neutral Surrogate Standard Recovery					
2-Fluorobiphenyl	66 %	d5-nitrobenzene	64 %	d14-p-terphenyl	68 %
U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in					

METHODOLOGY: Sample analysis was conducted according to: Test Methods for Evaluating Solid Waste, SW-846 Method 8270C.

COMMENTS: \*Due to the reactive nature of this compound, the Benzidine quantitation limit is estimated.  
Results are expressed on a dry weight basis.

*M. P. L. Hall*

Mr. Herb Kodis  
Maine Environmental Laboratory, Inc.  
PO Box 1107  
Yarmouth, ME 04096-1107

August 3, 2009

**SAMPLE DATA**

**CLIENT SAMPLE ID**  
**Project Name:** SME 833-09  
**Project Number:**  
**Field Sample ID:** TP 3A

**Lab Sample ID:** 64386-2  
**Matrix:** Solid  
**Percent Solid:** 80  
**Dilution Factor:** 118  
**Collection Date:** 07/23/09  
**Lab Receipt Date:** 07/24/09  
**Analysis Date:** 07/27/09

ANALYTICAL RESULTS VOLATILE ORGANICS					
COMPOUND	Quantitation Limit $\mu\text{g/kg}$	Result $\mu\text{g/kg}$	COMPOUND	Quantitation Limit $\mu\text{g/kg}$	Result $\mu\text{g/kg}$
Benzene	118	U	1,3-Dichloropropane	118	U
Bromobenzene	118	U	cis-1,3-Dichloropropene	118	U
Bromochloromethane	118	U	trans-1,3-Dichloropropene	118	U
Bromodichloromethane	89	U	2,2-Dichloropropane	118	U
Bromoform	89	U	1,1-Dichloropropene	118	U
Bromomethane	118	U	Ethylbenzene	118	U
n-butylbenzene	118	U	Hexachlorobutadiene	118	U
sec-butylbenzene	118	U	Isopropylbenzene	118	U
tert-butylbenzene	118	U	p-isopropyltoluene	118	U
Carbon Tetrachloride	118	U	Methylene Chloride	591	U
Chlorobenzene	118	U	Methyl-tert-butyl ether (MTBE)	89	U
Chloroethane	118	U	Naphthalene	118	U
Chloroform	89	U	n-Propylbenzene	118	U
Chloromethane	118	U	Styrene	118	U
2-Chlorotoluene	118	U	1,1,1,2-Tetrachloroethane	118	U
4-Chlorotoluene	118	U	1,1,2,2-Tetrachloroethane	89	U
Dibromochloromethane	89	U	Tetrachloroethene	118	U
1,2-Dibromo-3-chloropropane	118	U	Toluene	118	U
1,2-Dibromoethane	89	U	1,2,3-Trichlorobenzene	118	U
Dibromomethane	118	U	1,2,4-Trichlorobenzene	118	U
1,2-Dichlorobenzene	118	U	1,1,1-Trichloroethane	118	U
1,3-Dichlorobenzene	118	U	1,1,2-Trichloroethane	89	U
1,4-Dichlorobenzene	118	U	Trichloroethene	118	U
Dichlorodifluoromethane	118	U	Trichlorofluoromethane	118	U
1,1,1-Dichloroethane	118	U	1,2,3-Trichloropropane	118	U
1,2-Dichloroethane	89	U	1,2,4-Trimethylbenzene	118	U
1,1-Dichloroethene	89	U	1,3,5-Trimethylbenzene	118	U
cis-1,2-Dichloroethene	118	U	Vinyl Chloride	118	U
trans-1,2-Dichloroethene	118	U	o-Xylene	118	U
1,2-Dichloropropane	89	U	m,p-Xylene	118	U
Acetone	1180	U	Diethyl ether	118	U
Carbon Disulfide	118	U	2-Hexanone	1180	U
Tetrahydrofuran	591	U	Methyl isobutyl ketone	1180	U
Methyl ethyl ketone	1180	U	Di-isopropyl ether (DIPE)	118	U
t-Butyl alcohol (TBA)	2370	U	Ethyl t-butyl ether (ETBE)	118	U
t-Amyl methyl ether (TAME)	118	U	1,3,5-Trichlorobenzene	118	U
Surrogate Standard Recovery					
d4-1,2-Dichloroethane	84 %	d8-Toluene	80 %	Bromofluorobenzene	85 %
U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank					

**METHODOLOGY:** Sample analysis was conducted according to: Test Methods for Evaluating Solid Waste, SW-846 Method 8260B.

**COMMENTS:** Results are expressed on a dry weight basis. Sample collection and analysis in accordance with SW-846 method 5035A.



Mr. Herb Kodis  
Maine Environmental Laboratory, Inc.  
PO Box 1107  
Yarmouth, ME 04096-1107

August 4, 2009

**SAMPLE DATA**

**CLIENT SAMPLE ID**

Project Name: SME 833-09

Project Number:

Field Sample ID: TP 3A

Lab Sample ID: 64386-2  
Matrix: Solid  
Percent Solid: 80  
Dilution Factor: 1.2  
Collection Date: 07/23/09  
Lab Receipt Date: 07/24/09  
Extraction Date: 07/31/09  
Analysis Date: 08/02/09

PAGE ONE

ANALYTICAL RESULTS SEMI-VOLATILE ORGANICS					
ACID COMPOUND	Quantitation Limit $\mu\text{g/kg}$	Result $\mu\text{g/kg}$	ACID COMPOUND	Quantitation Limit $\mu\text{g/kg}$	Result $\mu\text{g/kg}$
2-Chlorophenol	430	U	Pentachlorophenol	850	U
4-Chloro-3-methylphenol	850	U	Phenol	850	U
2,4-Dichlorophenol	430	U	2,4,5-Trichlorophenol	610	U
2,4-Dimethylphenol	430	U	2,4,6-Trichlorophenol	430	U
2,4-dinitrophenol	850	U	Benzoic Acid	1200	U
4,6-Dinitro-2-methylphenol	850	U	2-Methylphenol	850	U
2-Nitrophenol	850	U	3+4-Methylphenol	850	U
2,6-Dichlorophenol	610	U	Benzyl Alcohol	850	U
4-Nitrophenol	850	U	2,3,4,6-Tetrachlorophenol	850	U
Acid Surrogate Standard Recovery					
2-Fluorophenol	59 %	d5-Phenol	60 %	2,4,6-Tribromophenol	72 %
BASE NEUTRAL COMPOUND	Quantitation Limit $\mu\text{g/kg}$	Result $\mu\text{g/kg}$	BASE NEUTRAL COMPOUND	Quantitation Limit $\mu\text{g/kg}$	Result $\mu\text{g/kg}$
1,2-Dichlorobenzene	610	U	Hexachlorobenzene	430	U
1,3-Dichlorobenzene	610	U	* Benzidine	610	U
1,4-Dichlorobenzene	430	U	3,3'-Dichlorobenzidine	610	U
2,4-Dinitrotoluene	430	U	Azobenzene	610	U
2,6-Dinitrotoluene	610	U	Bis(2-chloroethoxy)methane	610	U
Nitrobenzene	610	U	bis(2-chloroethyl) ether	430	U
Hexachlorobutadiene	610	U	bis(2-chloroisopropyl)ether	430	U
Dimethyl Phthalate	610	U	4-bromophenyl phenyl ether	610	U
Di-n-butyl phthalate	610	U	Butyl benzyl phthalate	610	U
di-n-octyl-phthalate	610	U	4-Chlorophenyl phenyl ether	610	U
Bis (2-ethylhexyl) phthalate	610	U	Diethyl Phthalate	610	U
1,2,4-Trichlorobenzene	610	U	Hexachlorocyclopentadiene	610	U
U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in					

METHODOLOGY: Sample analysis was conducted according to: Test Methods for Evaluating Solid Waste, SW-846 Method 8270C.

Authorized signature

*M. J. Hall*

Mr. Herb Kodis  
Maine Environmental Laboratory, Inc.  
PO Box 1107  
Yarmouth, ME 04096-1107

August 4, 2009

**SAMPLE DATA**

**CLIENT SAMPLE ID**

Project Name: SME 833-09

Project Number:

Field Sample ID: TP 3A

Lab Sample ID: 64386-2  
Matrix: Solid  
Percent Solid: 80  
Dilution Factor: 1.2  
Collection Date: 07/23/09  
Lab Receipt Date: 07/24/09  
Extraction Date: 07/31/09  
Analysis Date: 08/02/09

PAGE TWO

ANALYTICAL RESULTS SEMI-VOLATILE ORGANICS					
BASE NEUTRAL COMPOUND	Quantitation Limit µg/kg	Result µg/kg	BASE NEUTRAL COMPOUND	Quantitation Limit µg/kg	Result µg/kg
Acenaphthene	330	U	N-nitrosodimethylamine	610	U
Acenaphthylene	330	U	N-nitroso-di-n-propylamine	610	U
Anthracene	330	U	n-nitrosodiphenylamine	610	U
Benzo[a]anthracene	330	U	Pyridine	610	U
Benzo[a] pyrene	330	U	2-Methylnaphthalene	330	U
Benzo[b] fluoranthene	330	174 J	2-Chloronaphthalene	330	U
Benzo[k] fluoranthene	330	U	Naphthalene	330	U
Benzo( g,h,i) perylene	330	U	Phenanthrene	330	U
Chrysene	330	U	Dibenzofuran	330	U
Dibenz [a,h] anthracene	330	U	Aniline	610	U
Fluoranthene	330	264 J	4-Chloroaniline	610	U
Fluorene	330	U	2-Nitroaniline	610	U
Indeno [1,2,3-cd] pyrene	330	U	3-Nitroaniline	610	U
Pyrene	330	307 J	4-Nitroaniline	610	U
Hexachloroethane	430	U	Carbazole	330	U
Isophorone	610	U			
Base Neutral Surrogate Standard Recovery					
2-Fluorobiphenyl	66 %	d5-nitrobenzene	63 %	d14-p-terphenyl	70 %
U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in					

**METHODOLOGY:** Sample analysis was conducted according to: Test Methods for Evaluating Solid Waste, SW-846 Method 8270C.

**COMMENTS:** \*Due to the reactive nature of this compound, the Benzidine quantitation limit is estimated.  
Results are expressed on a dry weight basis.

*M. Phillips*

Mr. Herb Kodis  
Maine Environmental Laboratory, Inc.  
PO Box 1107  
Yarmouth, ME 04096-1107

August 3, 2009

**SAMPLE DATA**

**CLIENT SAMPLE ID**

Project Name: SME 833-09

Project Number:

Field Sample ID: TP-5A

Lab Sample ID: 64386-3

Matrix: Solid

Percent Solid: 82

Dilution Factor: 108

Collection Date: 07/23/09

Lab Receipt Date: 07/24/09

Analysis Date: 07/29/09

**ANALYTICAL RESULTS VOLATILE ORGANICS**

COMPOUND	Quantitation Limit µg/kg	Result µg/kg	COMPOUND	Quantitation Limit µg/kg	Result µg/kg
Benzene	108	U	1,3-Dichloropropane	108	U
Bromobenzene	108	U	cis-1,3-Dichloropropene	108	U
Bromochloromethane	108	U	trans-1,3-Dichloropropene	108	U
Bromodichloromethane	81	U	2,2-Dichloropropane	108	U
Bromoform	81	U	1,1-Dichloropropene	108	U
Bromomethane	108	U	Ethylbenzene	108	U
n-butylbenzene	108	U	Hexachlorobutadiene	108	U
sec-butylbenzene	108	U	Isopropylbenzene	108	U
tert-butylbenzene	108	U	p-isopropyltoluene	108	U
Carbon Tetrachloride	108	U	Methylene Chloride	542	U
Chlorobenzene	108	U	Methyl-tert-butyl ether (MTBE)	81	U
Chloroethane	108	U	Naphthalene	108	U
Chloroform	81	U	n-Propylbenzene	108	U
Chloromethane	108	U	Styrene	108	U
2-Chlorotoluene	108	U	1,1,1,2-Tetrachloroethane	108	U
4-Chlorotoluene	108	U	1,1,2,2-Tetrachloroethane	81	U
Dibromochloromethane	81	U	Tetrachloroethene	108	U
1,2-Dibromo-3-chloropropane	108	U	Toluene	108	U
1,2-Dibromoethane	81	U	1,2,3-Trichlorobenzene	108	U
Dibromomethane	108	U	1,2,4-Trichlorobenzene	108	U
1,2-Dichlorobenzene	108	U	1,1,1-Trichloroethane	108	U
1,3-Dichlorobenzene	108	U	1,1,2-Trichloroethane	81	U
1,4-Dichlorobenzene	108	U	Trichloroethene	108	U
Dichlorodifluoromethane	108	U	Trichlorofluoromethane	108	U
1,1-Dichloroethane	108	U	1,2,3-Trichloropropane	108	U
1,2-Dichloroethane	81	U	1,2,4-Trimethylbenzene	108	U
1,1-Dichloroethene	81	U	1,3,5-Trimethylbenzene	108	U
cis-1,2-Dichloroethene	108	U	Vinyl Chloride	108	U
trans-1,2-Dichloroethene	108	U	o-Xylene	108	U
1,2-Dichloropropane	81	U	m,p-Xylene	108	U
Acetone	1080	U	Diethyl ether	108	U
Carbon Disulfide	108	U	2-Hexanone	1080	U
Tetrahydrofuran	542	U	Methyl isobutyl ketone	1080	U
Methyl ethyl ketone	1080	U	Di-isopropyl ether (DIPE)	108	U
t-Butyl alcohol (TBA)	2170	U	Ethyl t-butyl ether (ETBE)	108	U
t-Amyl methyl ether (TAME)	108	U	1,3,5-Trichlorobenzene	108	U
Surrogate Standard Recovery					
d4-1,2-Dichloroethane	74 %		d8-Toluene	73 %	
			Bromofluorobenzene	76 %	
U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank					

**METHODOLOGY:** Sample analysis was conducted according to: Test Methods for Evaluating Solid Waste, SW-846 Method 8260B.

**COMMENTS:** Results are expressed on a dry weight basis. Sample collection and analysis in accordance with SW-846 method 5035A.

Authorized signature

*M. J. Full*

Mr. Herb Kodis  
Maine Environmental Laboratory, Inc.  
PO Box 1107  
Yarmouth, ME 04096-1107

August 4, 2009

**SAMPLE DATA**

**CLIENT SAMPLE ID**

Project Name: SME 833-09

Project Number:

Field Sample ID: TP-5A

Lab Sample ID: 64386-3  
Matrix: Solid  
Percent Solid: 82  
Dilution Factor: 1.2  
Collection Date: 07/23/09  
Lab Receipt Date: 07/24/09  
Extraction Date: 07/31/09  
Analysis Date: 08/02/09

PAGE ONE

ANALYTICAL RESULTS SEMI-VOLATILE ORGANICS					
ACID COMPOUND	Quantitation Limit µg/kg	Result µg/kg	ACID COMPOUND	Quantitation Limit µg/kg	Result µg/kg
2-Chlorophenol	420	U	Pentachlorophenol	840	U
4-Chloro-3-methylphenol	840	U	Phenol	840	U
2,4-Dichlorophenol	420	U	2,4,5-Trichlorophenol	600	U
2,4-Dimethylphenol	420	U	2,4,6-Trichlorophenol	420	U
2,4-dinitrophenol	840	U	Benzoic Acid	1200	U
4,6-Dinitro-2-methylphenol	840	U	2-Methylphenol	840	U
2-Nitrophenol	840	U	3+4-Methylphenol	840	U
2,6-Dichlorophenol	600	U	Benzyl Alcohol	840	U
4-Nitrophenol	840	U	2,3,4,6-Tetrachlorophenol	840	U
Acid Surrogate Standard Recovery					
2-Fluorophenol	62 %	d5-Phenol	64 %	2,4,6-Tribromophenol	70 %
BASE NEUTRAL COMPOUND	Quantitation Limit µg/kg	Result µg/kg	BASE NEUTRAL COMPOUND	Quantitation Limit µg/kg	Result µg/kg
1,2-Dichlorobenzene	600	U	Hexachlorobenzene	420	U
1,3-Dichlorobenzene	600	U	* Benzidine	600	U
1,4-Dichlorobenzene	420	U	3,3'-Dichlorobenzidine	600	U
2,4-Dinitrotoluene	420	U	Azobenzene	600	U
2,6-Dinitrotoluene	600	U	Bis(2-chloroethoxy)methane	600	U
Nitrobenzene	600	U	bis(2-chloroethyl) ether	420	U
Hexachlorobutadiene	600	U	bis(2-chloroisopropyl)ether	420	U
Dimethyl Phthalate	600	U	4-bromophenyl phenyl ether	600	U
Di-n-butyl phthalate	600	U	Butyl benzyl phthalate	600	U
di-n-octyl-phthalate	600	U	4-Chlorophenyl phenyl ether	600	U
Bis (2-ethylhexyl) phthalate	600	U	Diethyl Phthalate	600	U
1,2,4-Trichlorobenzene	600	U	Hexachlorocyclopentadiene	600	U
U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in					

METHODOLOGY: Sample analysis was conducted according to: Test Methods for Evaluating Solid Waste, SW-846 Method 8270C.

Authorized signature

*M. J. Hall*



Mr. Herb Kodis  
Maine Environmental Laboratory, Inc.  
PO Box 1107  
Yarmouth, ME 04096-1107

August 4, 2009  
**SAMPLE DATA**

**CLIENT SAMPLE ID**

Project Name: SME 833-09  
  
Project Number:  
Field Sample ID: TP-5A

Lab Sample ID: 64386-3  
Matrix: Solid  
Percent Solid: 82  
Dilution Factor: 1.2  
Collection Date: 07/23/09  
Lab Receipt Date: 07/24/09  
Extraction Date: 07/31/09  
Analysis Date: 08/02/09

PAGE TWO

ANALYTICAL RESULTS SEMI-VOLATILE ORGANICS					
BASE NEUTRAL COMPOUND	Quantitation Limit µg/kg	Result µg/kg	BASE NEUTRAL COMPOUND	Quantitation Limit µg/kg	Result µg/kg
Acenaphthene	320	U	N-nitrosodimethylamine	600	U
Acenaphthylene	320	196 J	N-nitroso-di-n-propylamine	600	U
Anthracene	320	203 J	n-nitrosodiphenylamine	600	U
Benzo[a]anthracene	320	237 J	Pyridine	600	U
Benzo[a] pyrene	320	226 J	2-Methylnaphthalene	320	U
Benzo[b] fluoranthene	320	283 J	2-Chloronaphthalene	320	U
Benzo[k] fluoranthene	320	U	Naphthalene	320	718
Benzo( g,h,i) perylene	320	U	Phenanthrene	320	593
Chrysene	320	225 J	Dibenzofuran	320	U
Dibenz [a,h] anthracene	320	U	Aniline	600	U
Fluoranthene	320	581	4-Chloroaniline	600	U
Fluorene	320	U	2-Nitroaniline	600	U
Indeno [1,2,3-cd] pyrene	320	U	3-Nitroaniline	600	U
Pyrene	320	582	4-Nitroaniline	600	U
Hexachloroethane	420	U	Carbazole	320	U
Isophorone	600	U			
Base Neutral Surrogate Standard Recovery					
2-Fluorobiphenyl	66 %	d5-nitrobenzene	64 %	d14-p-terphenyl	72 %
U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in					

**METHODOLOGY:** Sample analysis was conducted according to: Test Methods for Evaluating Solid Waste, SW-846 Method 8270C.

**COMMENTS:** \*Due to the reactive nature of this compound, the Benzidine quantitation limit is estimated.  
Results are expressed on a dry weight basis.

*M. J. Sullivan*

Mr. Herb Kodis  
Maine Environmental Laboratory, Inc.  
PO Box 1107  
Yarmouth, ME 04096-1107

August 3, 2009

**SAMPLE DATA**

**CLIENT SAMPLE ID**

Project Name: SME 833-09

Project Number:

Field Sample ID: TP-6A

Lab Sample ID: 64386-4

Matrix: Solid

Percent Solid: 84

Dilution Factor: 113

Collection Date: 07/23/09

Lab Receipt Date: 07/24/09

Analysis Date: 07/27/09

**ANALYTICAL RESULTS VOLATILE ORGANICS**

COMPOUND	Quantitation Limit µg/kg	Result µg/kg	COMPOUND	Quantitation Limit µg/kg	Result µg/kg
Benzene	113	U	1,3-Dichloropropane	113	U
Bromobenzene	113	U	cis-1,3-Dichloropropene	113	U
Bromochloromethane	113	U	trans-1,3-Dichloropropene	113	U
Bromodichloromethane	85	U	2,2-Dichloropropane	113	U
Bromoform	85	U	1,1-Dichloropropene	113	U
Bromomethane	113	U	Ethylbenzene	113	U
n-butylbenzene	113	U	Hexachlorobutadiene	113	U
sec-butylbenzene	113	U	Isopropylbenzene	113	U
tert-butylbenzene	113	U	p-isopropyltoluene	113	U
Carbon Tetrachloride	113	U	Methylene Chloride	564	U
Chlorobenzene	113	U	Methyl-tert-butyl ether (MTBE)	85	U
Chloroethane	113	U	Naphthalene	113	U
Chloroform	85	U	n-Propylbenzene	113	U
Chloromethane	113	U	Styrene	113	U
2-Chlorotoluene	113	U	1,1,1,2-Tetrachloroethane	113	U
4-Chlorotoluene	113	U	1,1,2,2-Tetrachloroethane	85	U
Dibromochloromethane	85	U	Tetrachloroethene	113	U
1,2-Dibromo-3-chloropropane	113	U	Toluene	113	U
1,2-Dibromoethane	85	U	1,2,3-Trichlorobenzene	113	U
Dibromomethane	113	U	1,2,4-Trichlorobenzene	113	U
1,2-Dichlorobenzene	113	U	1,1,1-Trichloroethane	113	U
1,3-Dichlorobenzene	113	U	1,1,2-Trichloroethane	85	U
1,4-Dichlorobenzene	113	U	Trichloroethene	113	U
Dichlorodifluoromethane	113	U	Trichlorofluoromethane	113	U
1,1-Dichloroethane	113	U	1,2,3-Trichloropropane	113	U
1,2-Dichloroethane	85	U	1,2,4-Trimethylbenzene	113	U
1,1-Dichloroethene	85	U	1,3,5-Trimethylbenzene	113	U
cis-1,2-Dichloroethene	113	U	Vinyl Chloride	113	U
trans-1,2-Dichloroethene	113	U	o-Xylene	113	U
1,2-Dichloropropane	85	U	m,p-Xylene	113	U
Acetone	1130	U	Diethyl ether	113	U
Carbon Disulfide	113	U	2-Hexanone	1130	U
Tetrahydrofuran	564	U	Methyl isobutyl ketone	1130	U
Methyl ethyl ketone	1130	U	Di-isopropyl ether (DIPE)	113	U
t-Butyl alcohol (TBA)	2260	U	Ethyl t-butyl ether (ETBE)	113	U
t-Amyl methyl ether (TAME)	113	U	1,3,5-Trichlorobenzene	113	U
<b>Surrogate Standard Recovery</b>					
d4-1,2-Dichloroethane	85 %		d8-Toluene	83 %	
			Bromofluorobenzene	85 %	
U=Undetected	J=Estimated	E=Exceeds Calibration Range	B=Detected in Blank		

**METHODOLOGY:** Sample analysis was conducted according to: Test Methods for Evaluating Solid Waste, SW-846 Method 8260B.

**COMMENTS:** Results are expressed on a dry weight basis. Sample collection and analysis in accordance with SW-846 method 5035A.

*M. J. Ball*

Mr. Herb Kodis  
Maine Environmental Laboratory, Inc.  
PO Box 1107  
Yarmouth, ME 04096-1107

August 5, 2009

**SAMPLE DATA**

**CLIENT SAMPLE ID**

Project Name: SME 833-09

Project Number:

Field Sample ID: TP-6A

Lab Sample ID: 64386-4 RX  
Matrix: Solid  
Percent Solid: 84  
Dilution Factor: 1.2  
Collection Date: 07/23/09  
Lab Receipt Date: 07/24/09  
Extraction Date: 08/04/09  
Analysis Date: 08/05/09

PAGE ONE

ANALYTICAL RESULTS SEMI-VOLATILE ORGANICS					
ACID COMPOUND	Quantitation Limit µg/kg	Result µg/kg	ACID COMPOUND	Quantitation Limit µg/kg	Result µg/kg
2-Chlorophenol	410	U	Pentachlorophenol	830	U
4-Chloro-3-methylphenol	830	U	Phenol	830	U
2,4-Dichlorophenol	410	U	2,4,5-Trichlorophenol	590	U
2,4-Dimethylphenol	410	U	2,4,6-Trichlorophenol	410	U
2,4-dinitrophenol	830	U	Benzoic Acid	1200	U
4,6-Dinitro-2-methylphenol	830	U	2-Methylphenol	830	U
2-Nitrophenol	830	U	3+4-Methylphenol	830	U
2,6-Dichlorophenol	590	U	Benzyl Alcohol	830	U
4-Nitrophenol	830	U	2,3,4,6-Tetrachlorophenol	830	U
Acid Surrogate Standard Recovery					
2-Fluorophenol	49 %	d5-Phenol	54 %	2,4,6-Tribromophenol	68 %
BASE NEUTRAL COMPOUND	Quantitation Limit µg/kg	Result µg/kg	BASE NEUTRAL COMPOUND	Quantitation Limit µg/kg	Result µg/kg
1,2-Dichlorobenzene	590	U	Hexachlorobenzene	410	U
1,3-Dichlorobenzene	590	U	* Benzidine	590	U
1,4-Dichlorobenzene	410	U	3,3'-Dichlorobenzidine	590	U
2,4-Dinitrotoluene	410	U	Azobenzene	590	U
2,6-Dinitrotoluene	590	U	Bis(2-chloroethoxy)methane	590	U
Nitrobenzene	590	U	bis(2-chloroethyl) ether	410	U
Hexachlorobutadiene	590	U	bis(2-chloroisopropyl)ether	410	U
Dimethyl Phthalate	590	U	4-bromophenyl phenyl ether	590	U
Di-n-butyl phthalate	590	U	Butyl benzyl phthalate	590	U
di-n-octyl-phthalate	590	U	4-Chlorophenyl phenyl ether	590	U
Bis (2-ethylhexyl) phthalate	590	U	Diethyl Phthalate	590	U
1,2,4-Trichlorobenzene	590	U	Hexachlorocyclopentadiene	590	U
U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in					

METHODOLOGY: Sample analysis was conducted according to: Test Methods for Evaluating Solid Waste, SW-846 Method 8270C.

*[Signature]*

Mr. Herb Kodis  
Maine Environmental Laboratory, Inc.  
PO Box 1107  
Yarmouth, ME 04096-1107

August 5, 2009

**SAMPLE DATA**

**CLIENT SAMPLE ID**

Project Name: SME 833-09

Project Number:

Field Sample ID: TP-6A

Lab Sample ID: 64386-4 RX  
Matrix: Solid  
Percent Solid: 84  
Dilution Factor: 1.2  
Collection Date: 07/23/09  
Lab Receipt Date: 07/24/09  
Extraction Date: 08/04/09  
Analysis Date: 08/05/09

PAGE TWO

ANALYTICAL RESULTS SEMI-VOLATILE ORGANICS					
BASE NEUTRAL COMPOUND	Quantitation Limit µg/kg	Result µg/kg	BASE NEUTRAL COMPOUND	Quantitation Limit µg/kg	Result µg/kg
Acenaphthene	320	U	N-nitrosodimethylamine	590	U
Acenaphthylene	320	U	N-nitroso-di-n-propylamine	590	U
Anthracene	320	U	n-nitrosodiphenylamine	590	U
Benzo[a]anthracene	320	U	Pyridine	590	U
Benzo[a]pyrene	320	U	2-Methylnaphthalene	320	U
Benzo[b]fluoranthene	320	U	2-Chloronaphthalene	320	U
Benzo[k]fluoranthene	320	U	Naphthalene	320	U
Benzo(g,h,i)perylene	320	U	Phenanthrene	320	U
Chrysene	320	U	Dibenzofuran	320	U
Dibenz[a,h]anthracene	320	U	Aniline	590	U
Fluoranthene	320	200 J	4-Chloroaniline	590	U
Fluorene	320	U	2-Nitroaniline	590	U
Indeno[1,2,3-cd]pyrene	320	U	3-Nitroaniline	590	U
Pyrene	320	273 J	4-Nitroaniline	590	U
Hexachloroethane	410	U	Carbazole	320	U
Isophorone	590	U			
Base Neutral Surrogate Standard Recovery					
2-Fluorobiphenyl	54 %		d5-nitrobenzene	49 %	
			d14-p-terphenyl	61 %	
U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in					

METHODOLOGY: Sample analysis was conducted according to: Test Methods for Evaluating Solid Waste, SW-846 Method 8270C.

COMMENTS: \*Due to the reactive nature of this compound, the Benzidine quantitation limit is estimated.  
Results are expressed on a dry weight basis.





172

# MAINE ENVIRONMENTAL LABORATORY- Chain of Custody

One Main Street Yarmouth, Maine 04096-6716 (207) 846-6569 fax: (207) 846-9066  
e-mail: melab@maine.rr.com

PROJECT MANAGER

M. Deyling

TELEPHONE

FAX # / E-MAIL

COMPANY

PURCHASE ORDER # / BILL TO

ADDRESS

PROJECT NAME

0ME833-09

SAMPLER NAME

R. Macciola

SAMPLE IDENTIFICATION

# CONTAINERS

TYPE OF CONTAINERS

FIELD FILTRATION  
YES NO

SAMPLE MATRIX

GRAB

METHOD PRESERVED

DATE

TIME

COMMENTS

LABORATORY IDENTIFICATION/ SUBCONTRACTOR

TURNAROUND REQUEST

Standard ☐ Priority (SURCHARGE) ☒

Quote # 0MEC3120101-2

Delivered by

ANALYSES

LABORATORY REPORT #

Analytics Report 64386 page 0014 of 14

Received within hold time

Received in good condition

Temp. Blank °C 3.8

Samples received preserved

RELINQUISHED BY SAMPLER:

RELINQUISHED BY:

RELINQUISHED BY:

COMMENTS

Labels JES JUL 7:24:09

RECEIVED BY:

RECEIVED BY:

RECEIVED BY LABORATORY: